

Musicians and Musical Instruments of Classical Greece

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<p>Tiivistelmä – Referat – Abstract</p> <p>This study combines two elements related to music in ancient Greece: musicians and musical instruments of Classical Greece. The main research questions answered in this study are: “What were the musicians of Classical Greece?” and “What were the most important musical instruments of Classical Greece?”.</p> <p>The study of the musicians of Classical Greece showed that the words “music” and “musician” are not entirely representative of the ones used in the antique context and therefore a clearer frame – in which we use these two terms for the purposes of a contemporary study – has to be given. There are a lot of limitations in the research of musicians in early and late antiquity due to the fragmentary sources and the absence of sufficient and reliable archaeological evidence.</p> <p>Musicians of Classical Greece were not considered only teachers, dancers, singers or instrument players but also individuals who were involved theoretically with music and were specialists. Before the 4th century BCE there is also a more detailed way in describing someone interfering with music whereas during the 4th century BCE the term <i>mousikos</i> appears. Boys in Athens had access to education and received proper musical training. Girls in Athens were not entitled to education as part of the organized educational system, but they learnt somehow how to dance, sing and play an instrument. Outside Athens the situation differed according to the status of woman in society. There were professional musicians with a high social status and amateur musicians, although we know very little about musical training itself. Eminent professional musicians received a very high salary whereas musicians of lower status received a small pay. It seems like everyone was allowed to play music or interfere with music in general and there were no limitations.</p> <p>The research on the second element, the musical instruments of Classical Greece, showed that they were classified into three categories: the stringed instruments, the wind instruments and the percussion instruments. Stringed instruments included the lyres, the harps and the lutes. The most important lyres were <i>lyra</i>, <i>barbitos</i>, <i>phorminx</i> and <i>kithara</i>. The harp family or <i>psalterion</i> included a variety of names that are difficult to recognize in illustrations and describe with accuracy. These were the <i>epigoneion</i>, the <i>pektis</i>, the <i>simikion</i>, the <i>sambyke</i>, the <i>nabla</i>, the <i>trigonon</i> and the <i>psalterion</i>. It has been argued that the <i>magadis</i> – which is usually referred to as a member of the harp family – was not an instrument at all. The only lute was the <i>pandoura</i> or <i>trichordon</i>. The most important wind instruments were the <i>aulos</i> and the <i>syrix</i>. Finally the most important percussion instruments were the <i>tympanon</i>, the <i>seistrion</i>, the <i>krotalon</i>, the <i>kymbalon</i> and the <i>krembala</i>.</p> <p>Contemporary research has advanced to such a degree that today we have straight access to beautifully handmade replicas of ancient Greek instruments and the opportunity to learn how to play them. Researchers, instrument builders and musicians all around the world have been working together to achieve a level of excellence in instrument replication and playing. Progress is being constantly made thanks to various music oriented projects and enthusiastic researchers and music lovers.</p>			
<p>Avainsanat – Nyckelord – Keywords</p> <p>Classical Greece, musicians, ancient musical instruments, <i>mousike</i>, <i>mousike tekhnē</i>, <i>mousikos</i>, <i>lyra</i>, <i>barbitos</i>, <i>phorminx</i>, <i>kithara</i>, <i>magadis</i>, <i>aulos</i>, Plato, Republic</p>			
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1 Introduction

My Master's thesis is a continuation of my Bachelor's thesis about "*Mousike tekhnē* in Plato's *Republic* (398e–399d)" and will comprise two key elements that are linked to each other: musicians and musical instruments of Classical Greece. In this study I broadly examine the field of music in ancient Greece with a particular focus on the musicians and the musical instruments of the Classical period in Greece, a period that lasted approximately for two centuries, the 5th and the 4th century BCE.

Music in antiquity has triggered the interest of many scholars in the past and it continues inspiring classicists and drawing the attention of everyday people as well. As a native Greek, I have personally attended live musical performances with reconstructed ancient Greek musical instruments in Greece and as a traveler I have encountered numerous ancient Greek illustrations of musicians and musical instruments in museums all around the world. Being myself an instrumentalist and a music performer, the field of music instantly and naturally attracted my interest. Therefore, I began examining the past and was pleased to find out that there has been a considerable amount of study on the music of ancient Greece and Rome based on the available archaeological evidence such as papyri, vase paintings and engraved stones. My personal enthusiasm for music and the availability of previous research in the field of ancient Greek music rendered possible the materialization of this study.

My contact with music has been closer than that of an amateur but more distant than that of a professional musician or music theorist and from this middle position I have conducted this research. I have chosen the wider topic of music, knowing that I have a sense of how music is played, conceived, performed and transferred to the audience in the 21st century CE. As an average person living in the 21st century CE, without an academic musical training, I perceive music as a form of art based on sound and rhythm or as a written notation system that represents sound (opening any official dictionary would give us these two definitions of music). As a student of Greek Language and Literature, through Classical text reading and quotes about music, I have developed a special interest in the ancient Greek music and especially in what I perceive as its two main channels or carriers: musicians and musical instruments. Without these two, there is no possibility of rendering the sound audible. I have also limited down my study to the Classical period in Greece, as I was led there by the

choice of musical instruments in Plato's (c. 427–347 BCE) *Republic*¹, a work which is believed to have been published around 380 BCE and works as an important study source for the Classical period. Two other important Classical sources that triggered my interest in musicians and musical instruments during my university studies are Plato's and Xenophon's (c. 431–354 BCE.) works named *Symposium*, both dated around 385–370 BCE. These two works bear the same name and were written by two contemporaries, who provide us with some information on the musical activity during the *symposia*² (lit. “drinking parties”) that were broadly held during the Classical period and more specifically of the instrument players involved with them and the instruments they were using in their performances.

Among the purposes of this study is to examine and comprehend the different aspects of a musician's life in Classical Greece investigating the archaeological evidence (e.g. papyri, inscriptions, vase paintings) and the academic research we have available so far. My focus is mainly on the Classical period in Greece with some short references to the Dark Ages and the archaic period that preceded the Classical period. In addition to the musicians, this study investigates the most important musical instruments of ancient Greece, covering the times of the Cycladic civilization to the Homeric epics and until the end of the Classical period. This covers a period from the 3rd millennium BCE until the late 4th century BCE. There were certainly more instruments used in antiquity after the Classical period, but they are excluded from this study. I will attempt to classify and understand the important instruments we know and that were in use during those centuries in Greece. These are the musical instruments that are frequently depicted in vase illustrations and statuary and are mentioned in surviving literature. I am especially focusing on and analyzing the musical instruments of the Classical period (early 5th to late 4th century BCE) and those that are referred to in the third book of Plato's *Republic* and specifically in lines 399c7–399e3. Finally I am shedding light onto the fate of musical instruments of ancient Greece in modern times and I provide the information we have about them today.

At this point of the introduction, it is of utmost importance to understand the lines 399c7–399e3 of Plato's *Republic* mentioned above. The *Republic* was mainly the reason for the beginning of my academic study in the field of ancient Greek music and therefore it is significant to open the content of these lines. During a discussion between Socrates and Plato's brother Glaucon about the utopian city-state, an agreement is made: there will be only

¹ Plat. *rep.* 399c5–399e1.

² LSJ s.v. 'συμπόσιον', 1685.

specific musical instruments allowed in the utopian city-state. The names of the forbidden and the accepted musical instruments are given in Plato's text. The prohibition of certain musical instruments and acceptance of others made me wonder, what caused this arrangement between the two speakers. The purpose of this study is therefore not only to examine and comprehend the musicians and the musical instruments of Classical Greece and the knowledge of them today but also to provide a basis for the examination of the prohibition and acceptance of certain musical instruments in Plato's *Republic* for the needs of future study.

Although this study belongs to the field of music, there will be no attempt to analyze the ancient Greek musical notation system or the rules surrounding it on a theoretical level. I will not refer to music theory terms such as *scales*, *tones*, *intervals*, *harmonies*, *modes* or *notes* as I do not have the appropriate musical education to support a study of such content. To those interested in a more technical analysis I recommend Andrew Barker's study (1984 and 1989), a scholar whose research appears to be very useful. Barker has examined music of the 5th and 4th centuries BCE from a quantitative and mathematical point of view. I conduct this research from a practical point of view. Last but not least, the illustrations of instruments that I use in this study are all from the Classical period.

The importance of music and its special position in the life of ancient Greeks is beyond doubt. As I present in this study, we certainly know that music was present everywhere in ancient Greece, in literally every aspect of Greek life. Several centuries later I am exploring a silent past. But is it actually that silent?

1.1 Study questions

The main study questions that I am focusing on answering are these two: "What were the musicians of Classical Greece?" and "What were the most important musical instruments of Classical Greece?". In order to support, enhance and complete the answer to the two main questions, I will answer several sub-questions that have occurred to me during the research process. I will resolve sub-questions linked to the first main question, such as "What was the definition of a musician in Classical Greece?", "Were there professional musicians in Classical Greece?", "What was the social status of musicians during the Classical period and what was their training like?", "Did musicians get a salary or a decent pay in general?", "Were female and male musicians different in any sense or treated differently?", "Who was allowed to play music if there were any limitations?", "Did musicians tour as a means of

making a living and was music playing a full-time job?” and “Were there skillful or famous musicians?”. There are also sub-questions linked to the second main study question, and these are: “What do we know today about the musical instruments of Classical Greece?”, “Are there any archaeological finds of original ancient Greek instruments?” and “What are the difficulties that contemporary research on ancient Greek musical instruments encounters?”. In order to answer to the second main study question, I am presenting a classification of the most important instruments of ancient Greece from the times of the Cycladic civilization to the Homeric epics and until the end of the Classical period. This long period is covering the 3rd millennium BCE up until the late 4th century BCE. I am putting here special emphasis on the instruments of the Classical period, a period that includes the instruments mentioned in Plato’s *Republic* 399c7–399e3.

1.2 Background

Music of antiquity has been studied by classicists quite a lot during the last century. The scholars have provided us with some significant literature, the earliest of which dates back to the 1920’s by the French scholar Théodore Reinach (1860–1928). The field has been examined from different points of view with some scholars focusing on the technical and theoretical side of music (meter, notation, scales etc.), other scholars focusing on the acoustic and practical side of music (reconstructing the sound of ancient Greek music and rebuilding instruments) or a combination of both. Archaeological excavations have brought to light discoveries such as texts in papyri, art and texts engraved in stone and vase paintings that serve as evidence of the richness of musical activity during the Classical period. Unfortunately, research in the field appears to be limited due to the absence of sufficient and fully reliable archaeological evidence.

Concerning ancient Greek music in general, we have important literature from the previous century and the beginning of our century conducted by acclaimed scholars such as Warren D. Anderson, M. L. West, Edward A. Lippman, John G. Landels, Andrew Barker and Curt Sachs to mention some. During the recent years there have also been significant research attempts. Classicists have been bringing more information to the academic world and to the public, through a careful examination of Classical texts, and some additional light has been shed on the status of women players in ancient Greece.

As far as the musical instruments are concerned, the only knowledge of them that scholars and researchers have had for years, was from survived literature (some of this

literature is unfortunately corrupted), illustrations and texts on pottery and statuary and also other archaeological findings, for example relics found in graves. As one might expect, there are no audio recordings from antiquity at all. As a result, for a long time the research in the field of ancient musical instruments appears to have been limited and as silent as the ancient music itself, due to this absence of actual sound but also due to the absence of sufficient and reliable archaeological evidence.

Nevertheless during the past two decades there have been considerable attempts to revive the sound of ancient Greek music, to rebuild replicas of ancient musical instruments and to examine the status of musicians in early and late antiquity among other study attempts. While collecting the material for the purposes of this research, I discovered a number of motivated researchers and professors who are working on various music-oriented projects in order to revive music of ancient Greece. In addition to the scholars there are a lot of enthusiastic professional musicians and non-professional instrument players all around the world. I was really fascinated by the extent of research that has been and is being conducted and the level of today's craftsmanship when it comes to rebuilding ancient Greek instruments. I have also been watching audiovisual material available online, listening to researchers, professors, music theorists, instrument players and watched a plethora of live performances online. I have collected audiovisual material (as new and as reliable as possible) mainly from professors' and researchers' own channels and blogs.

So far, we have had a lot of bibliography about ancient Greek music, but finally there is also material evidence: there are replicated musical instruments and audio recordings of them. Thanks to the scholars mentioned above who have done an enormous amount of study in the field of ancient Greek music we have a lot of knowledge based on the literature. However during the last two decades a new chapter in ancient Greek music research has begun with the revival of the sound of ancient Greek music and new names are being added to the list of scholars who continuously contribute to research not only through bibliography but also through providing substantial evidence, especially audible evidence. These are Stefan Hagel, Armand D'Angour, Stelios Psaroudakes, Barnaby Brown and the Koumartzis family who will all be presented in this study.

1.3 Disposition

The structure of this research is clear and functional. After the introduction, I present the role of music in Classical Greece (Chapter 2) giving special attention on music as associated with

education, religion and mathematics (Sections 2.1, 2.2 and 2.3 respectively). After analyzing the word “music” I am passing to what I regard as the first integral part of music that is musicians. I examine what was the meaning of the word “musician” in Classical Greece (Chapter 3) and I divide this chapter into two sections, the male (Section 3.1) and the female musicians (Section 3.2). In each section I make a further division into young and adult male (Subsections 3.1.1 and 3.1.2) and young and adult female musicians (Subsections 3.2.1 and 3.2.2). As the research proceeds, I present a classification of the musical instruments of ancient Greece and I give some general information about them (Chapter 4). This is a first general approach. The classification is done into three categories: stringed instruments (Section 4.1), wind instruments (Section 4.2) and percussion instruments (Section 4.3). Each section – except Section 4.3 – is divided into subsections, each of which is named after the instrument that is presented in the subsection. In the next chapter (Chapter 5), I concentrate on specifically examining the musical instruments that are mentioned in Plato’s *Republic* 399c7–399e3 and therefore instruments of the Classical period. This chapter is divided into two sections: “The forbidden musical instruments of the *Republic*: *trigonon*, *pektis* and *aulos*” (Section 5.1) and “The accepted musical instruments of the *Republic*: *lyra*, *kithara* and *syrinx*” (Section 5.2). After this, I present contemporary scholarship and research of the musical instruments of the Classical period (Chapter 6). This chapter is also divided into two sections: “Archaeological finds and replication of ancient Greek musical instruments” (Section 6.1) and “The problems of contemporary research on ancient Greek musical instruments” (Section 6.2). The first section is divided into subsections under the name of the musical instrument presented in each subsection whereas the second section remains undivided. In the final chapter (Chapter 7) I summarize the results of my study and recommend further research.

2 Music in Classical Greece

In order to understand the antique frame in which musicians functioned and musical instruments were used, I will initially analyze the term “music” in order to give an image of what it possibly meant in Classical Greece. In terms of comprehending the meaning of music existent approximately two and a half thousand years ago, an important condition is required: to understand the context in which music existed in antiquity. It is also important to consider the possible changes that the status of music encountered during antiquity, because there has been evidence of a decline of its status to which I will refer in the section below.

As far as the historical context is concerned, the Classical period was a period of major political, economic, military and educational changes in the Greek world. Scholars set the beginning of this period in the 5th century BCE and more specifically right after the end of the Persian wars in 479 BCE with the total victory of Greeks over Persians in the battle of Plataea. The 5th century BCE was the period of the Golden Age of Pericles (c. 495–429 BCE) in Athens, when Athens overpowered any other Greek city-state until the beginning of the Peloponnesian war in 431 BCE. The 4th century was a restless time for the autonomous Greek city-states with three major headliners: Athens, Sparta and Thebes changing position in power until the Macedonian kingdom took over in Greece after the battle of Chaeronea in 338 BCE. Almost 10 years later, we are passing from the Classical to the Hellenistic period. There will be only short reference to the Hellenistic period in this study.

Greeks did not refer to music just as “music” but as *mousike tekhnē* (lit. “art of the Muse(s)”), a clarification that also Murray and Wilson³ make, supporting that this is not music in the modern sense of the term, but *mousike*, meaning the union of song, dance and word to which the Muses gave their name. By *mousike* ancient Greeks meant for a long period the whole of spiritual and intellectual faculties, and especially art (any art under the protection of the Muses) and in particular lyric poetry (poetry with music).⁴ Murray and Wilson use exclusively the terms *mousike tekhnē* and *mousike* when referring to music in Classical Greece, whereas Marrou⁵ makes a slightly different approach by referring to music both in a wider and a narrower sense. Marrou uses the simple term “music” and makes a distinction between its wider sense used in Plato (signifying the domain of the Muses) and its narrower sense used generally in ancient education as in vocal and instrumental music. The most recent approach on the matter is that of Phillips and D’Angour⁶ presenting the challenge of translating and understanding ancient terminology and referring to the usage of the word “music” as going against the terminological grain of recent scholarship on performance culture. For the purposes of this study I will use the common English word “music” to denote *mousike tekhnē* and *mousike* of the Classical period.

The word *mousike*⁷ (lit. “Muse-like”) appeared for the first time in a text⁸ of Pindar of Thebes (c. 518–438 BCE) dated back to 476 BCE and is a derivative noun (more specifically

³ Murray & Wilson 2004, 1.

⁴ Michaelides 1978, 214.

⁵ Marrou 1956, 69.

⁶ Phillips & D’Angour 2018, 16–19.

⁷ LSJ s.v. ‘μουσική’, 1148.

an adjective) of the root word *Mousa*⁹ (lit. “Muse”). Muses were deities of dance, song and music and the protectresses of all arts and sciences.¹⁰ In *Theogony*¹¹ – a work attributed to Greek poet Hesiod (c. 750–650 BCE) – there is a presentation of the nine Muses, the entire number of Muses known to us from the mythological texts available. Each one of the Muses represented a specific field of art or science and had an emblem, usually an item or a musical instrument. Calliope represented epic poetry and music played with stringed instruments, Erato represented lyric poetry and Euterpe *aulos*¹² music (lit. “pipe, flute or oboe¹³ music”). Terpsichore was the Muse of dance and choral poetry, Polyhymnia (also Polymnia) represented dance, pantomime and geometry, Clio (also Cleio) was the protectress of history and finally astronomy, tragedy and comedy were protected by Urania, Melpomene and Thalia (also Thaleia) respectively. In the first lines of the *Odyssey* and the *Iliad* the poets are calling the Muses, in order to be provided by them with the appropriate creative inspiration. This already indicates how important Muses were to the Greeks. The Muses played a significant role in antiquity as protectresses of sciences and arts.

When we speak about music today, we broadly refer to one type of art based on sound and melody aiming to please somebody, as well as to its written form and we use the word as a substantive in terms of grammar. In antiquity, the word used in this similar sense was *mousike*, a substantivized adjective in the feminine grammatical gender (masc. *mousikos*¹⁴), which meant more than just one type of art. In addition to this, *ta mousika* (the plural form of the neuter *to mousikon*) was used in the meaning of music and pleasant and delightful tunes.¹⁵ *Mousike tekhnē* included all of the types of art and science that the Muses were protecting according to mythology. *Mousike tekhnē* did not include only melody but also poetry (epic, lyric and drama) as well as dance and text. In this sense we can perceive the music of antiquity as an entity that consisted of sound, text and movement. This entity became a completely autonomous and independent art in the 4th century BCE.¹⁶ Nowadays, when we describe music, we do not necessarily include the text and body movement, but an

⁸ “ἀγλαΐζεται δὲ καὶ μουσικᾶς ἐν ᾧ τῳ”, translated as “while he rejoiceth in the bloom of music (song)” (Pind. *O.* A14-15).

⁹ LSJ s.v. ‘Μοῦσα’, 1148.

¹⁰ Paavo Castrén & Leena Pietilä-Castrén 2000, 354–355.

¹¹ Hes. *theog.* 75–79.

¹² LSJ s.v. ‘αὐλός’, 277.

¹³ Marrou 1956, 188. (Marrou does not like the translation “flute”, but prefers “oboe”. For more details about this terminological issue see Chapter 4).

¹⁴ LSJ s.v. ‘μουσικός’, 1148–1149.

¹⁵ Michaelides 1978, 213.

¹⁶ Michaelides 1978, 214.

instrumental composition consisting only of sound can function easily as a perfect example of what we call “music”. In general, the comparison of contemporary music to ancient Greek music is a very difficult task, due to the lack of important cultural context and sufficient and reliable archaeological evidence.

We certainly know that music was present everywhere in Greece, in literally every aspect of Greek life. We know that all poetry was sung entirely or partly even since the epic poetry of the Dark Ages (c. 1100–700 BCE) and the lyric poetry of the archaic period (c. 700–480 BCE). The development of a third major category of Greek poetry during the Classical period, the drama, boosted the significance of music in the life of the Greeks and possibly played a role in the development of music into an autonomous and independent art in the 4th century BCE. Music was present in all private and public activities: family feasts, weddings, funerals, harvest, *symposia*, games, battles, athletic competitions, festivals, construction work, field work and religious occasions to mention some. For example, lyric poetry was performed in funerals and more specifically there were sung lamentations called *threnoi*,¹⁷ whereas in weddings people would sing *epithalamia*¹⁸ (lit. “bridal songs”). There were special songs for the praising of individuals called *enkomia*¹⁹ (lit. “laudatory odes”). There were songs performed only by young maidens, called *partheneia*.²⁰ Harvesting songs were accompanying the workers in the fields and warriors were preparing for battle singing *paians*²¹ in the battlefield, dedicated to God Apollo. Epic poetry was performed in theaters, feasts, schools, even on the streets. Lyric poetry continued being popular thanks to Pindar²² and Simonides of Ceos (556–468 BCE). *Epinikia*²³ were dedicated to the winners of athletic competitions and *dithyramboi*²⁴ hymns were sung and danced to God Dionysus. Music was not present only in such activities, but it was used also in the healing process of the body and the soul, restoring good health.²⁵ Philosopher Pythagoras of Samos (c. 570–495 BCE) who played the stringed musical instrument *lyra*²⁶ (lit. “lyre”) and sung himself, used music in a therapeutic manner as well. During the Classical period there was also a strong common

¹⁷ LSJ s.v. 'θρήνος', 805–806.

¹⁸ LSJ s.v. 'ἐπιθαλάμιος', 633.

¹⁹ LSJ s.v. 'ἐγκώμιον', 475.

²⁰ LSJ s.v. 'παρθένεια', 1339.

²¹ LSJ s.v. 'παιάν', 1286.

²² Pindar composed a variety of lyric poems as *epinikia*, *dithyramboi* and *paians*.

²³ LSJ s.v. 'ἐπινίκιος', 648.

²⁴ LSJ s.v. 'διθύραμβος', 427.

²⁵ Martin West's article *Music therapy in antiquity* (p. 69–83) is published in the work *Music as Medicine: The History of Music Therapy since Antiquity*, ed. by Peregrine Horden (Sydney, 2000).

²⁶ LSJ s.v. 'λύρα', 1066.

perception that the civilized and cultured man should be *mousikos aner* (lit. “musical man”). In the words of Marrou, Greek culture and education were artistic rather than scientific, and Greek art was musical before it became literary and plastic.²⁷ As we can easily assume from the above, music was something popular and of utmost importance in ancient Greece.

A significant attempt to reconstruct ancient Greek music was first made by French scholar Théodore Reinach in 1893.²⁸ During the recent years there have been considerable attempts to reconstruct ancient Greek music, so that we could form an image of what it was like in antiquity as it is further presented in Chapter 6. A very important attempt to reconstruct ancient Greek music nowadays is being conducted by the European Music Archaeological project (EMAP).²⁹ Scholars have been able to decipher and reconstruct archaeological evidence dating back to the 5th and 2nd centuries BCE. We have three important archaeological finds available so far: 1) a papyrus providing us with a fragment of Euripides’ *Orestes* originally performed in 408 BCE³⁰, 2) two Delphic *paians*³¹ (hymns dedicated to Apollo) inscribed in marble dated to 138 and 128 BCE and 3) a marble stele named “The Seikilos column”³² discovered on the coast of Anatolia in 1883 and kept in the museum of Copenhagen since 1966, dated approximately to the 2nd century BCE. All four of these pieces of music are rendered audible to us thanks to the transcription of the ancient music notation to the western music notation system and rebuilding of replicas of ancient Greek instruments using for example relics of ancient *auloi* (plural form of *aulos*) as a model and by that, we can assume the level of skill required to play the instruments. Modern materials are used to reconstruct the instruments and reproducing the sound gives a more realistic approach to the sound of ancient Greek music. More about musical instruments will be presented below, in Chapter 4.

²⁷ Marrou 1956, 70.

²⁸ Reinach transcribed the Delphic hymn to the modern musical notation. Scholars John G. Landels, Egert Pöhlmann, Barnaby Brown and Armand D’Angour have also studied the two Delphic hymns during the last two decades including the significant work of the late M. L. West (†2015).

²⁹ The European Music Archaeology project (EMAP), <http://www.emaproject.eu/>.

³⁰ [Steven Baur, "Euripides, Stasimon Chorus from Orestes"](#). (YouTube video).

³¹ [Petros Tabouris, "First Delphic Hymn to Apollo"](#) and [Petros Tabouris, "Second Delphic Hymn to Apollo"](#). (YouTube videos).

³² [Ancient History Encyclopedia, "Oldest Song from Ancient Greece: The Seikilos Song"](#). (YouTube video).

2.1 Music and education

There are no sources available to show any well-organized musical tuition before the Classical period. We suppose that someone would learn to sing, play an instrument or dance by practicing on their own or learning from someone who is more experienced like a friend, a relative or an expert in general. Overall, very little is known about how music was taught during the Classical period.³³ The organized system of musical education appears in the beginning of the 5th century in the most powerful Greek city of that period, Athens.

Music had always been one of the basic elements of the educational system in ancient Greece.³⁴ Education was actually merely the privilege of boys in the Classical period and was available to all free men regardless their status of wealth. Most of the Greek citizens sent their sons to school. In Athens, boys between 6/7–14 years of age attended the *palaistra*³⁵ (lit. “wrestling-school”) for physical training and education, and the music school for musical education. Boys usually stopped attending school at the age of 14. Music was one of the main subjects taught in schools. The importance of music in education was emphasized particularly by Plato, who believed that rhythm and harmony can approach the depths of human soul and affect the character of young boys in either a favorable or a catastrophic way.³⁶ According to Plato, the most meaningful aspects of education were musical and physical training (gymnastics). He believed that education was two-sided: physical exercise for the development of the body and musical training for the development of the soul.³⁷ There were other subjects as well in the school curriculum, but greater attention was put onto music and physical training.³⁸ This pattern of education attributed to the ideal of wholeness of man³⁹ that aimed in forming men of physical and moral excellence to become perfect citizens of the city-state.

The educational systems of the two most powerful Greek city-states of the Classical period, Athens and Sparta, were slightly different from each other. In Athens, education was not offered to girls at all and their knowledge was limited around household oriented activities. Apart from music and gymnastics, Athenian boys were taught architecture, sculpture, drawing, painting, philosophy and even science. In the music school boys were

³³ Marrou 1956, 189.

³⁴ Kaimakis 2005, 54; Anderson 1966, 1–33.

³⁵ LSJ s.v. ‘παλαίστρα’, 1290.

³⁶ Plat. *rep.* 401d5–402a6.

³⁷ Plat. *leg.* 795d5–8.

³⁸ Castle 1961, 45.

³⁹ Castle 1961, 69.

taught reading, spelling, recitation (this included memorizing and reciting parts of Hesiod's and Homer's poems), writing and simple arithmetic. During the later Hellenistic period finally girls were accepted to primary and secondary schools even *palaistra* and gymnasium, but not during Classical Athens. Spartan education was focusing much more on the physical training for war. Boys learnt military music, recited the laws of the state to music, were taught how to use the spear, how to fight and wrestle. Spartan girls and women were also trained in gymnastics and domestic arts. Woman was the equal and assistant of a man and not his inferior.⁴⁰ Focus was put on the physical training, as the training was preparing strong and healthy women in order to bear healthy children. Art, music, literature and philosophy did not seem to be of much interest among the Spartans.

A well-preserved *kylix*⁴¹ (lit. "wine cup"), the Duris vase, depicting a scene from a school lesson in Classical Athens (see Fig. 1a and 1b) dated around 490–480 BCE shows us clearly that the *aulos*, *lyra* and singing were being taught to young boys during a school day. In the left corner of figure 1a we see a teacher seated and playing the *aulos*, while a young student standing in front of him is preparing to sing. Figure 1b depicts a seated teacher and a seated young male student practicing on the seven-stringed *lyra*. During the Classical period school years, music was taught by a *kitharistes*⁴² (lit. "*kithara*⁴³ player"), a special teacher, who was an instrument playing and singing instructor. Training in music consisted of practice on the *aulos*, the seven-stringed *lyra* and singing. Reading, writing and poetry were taught by a *grammatistes*.⁴⁴ When it comes to movement (dancing), the third important element of ancient Greek's *mousike tekhnē*, this was not taught in schools at all, unless a boy was being prepared for a dancing competition outside the school activities. As far as the physical training is concerned, this was done by a *paidotribes*,⁴⁵ the gymnastic master.

2.2 Music and religion

Apart from daily life, music played an enormous role during religious activities as well. As Reinach⁴⁶ points out, no religious ceremony (libation, sacrifice, escort, group praying)

⁴⁰ Eby & Arrowood 1940, 212.

⁴¹ LSJ s.v. 'κύλιξ', 1008.

⁴² LSJ s.v. 'κιθαριστής', 950.

⁴³ LSJ s.v. 'κιθάρα', 950. (A type of lyre that is presented in section 4.1).

A type of *lyra*, bigger and heavier than a normal *lyra*. *Cithara* had more strings than a *lyra*.

⁴⁴ LSJ s.v. 'γραμματιστής', 359.

⁴⁵ LSJ s.v. 'παιδοτρίβης', 1288.

⁴⁶ Reinach Théodore, *Η ελληνική μουσική*, translated by Anastasia-Maria Kontostathi 1999, p. 164.

happened without the accompaniment of musical instruments and song. One of the main elements of the numerous religious festivals held during the Classical period was musical performances that were organized as contests. Festivals dedicated to gods were an occasion of joy, making merry and getting together with other people while honoring the god or gods in question. This included dancing, recitation of epic poetry and competing in athletic games as well as singing and musical instrument playing. Musicians and dancers were an integral part of these celebrations. Especially with the development of drama during Classical Greece, the tragedy, comedy and satyr play competitions in festivals started being exceptionally popular. Sacrifices to gods were performed with *lyra* and *aulos* accompaniment. In figures 2a and 2b we see an Athenian *stamnos*⁴⁷ (lit. “ceramic jar”) of the Classical period, depicting a young man named Sosiphos playing the *aulos* during the sacrificial ceremony (see Fig. 2a) and on the other side of the *stamnos* we see a young man holding a *lyra* (see Fig. 2b).

There was music in all big religious festivals dedicated to a god or goddess (or more than one). In Athens alone, there were 120 days of festivals during a year, functioning as the gathering of thousands of citizens. The Panathenaia, the most important and biggest festival in Athens, were held in honor of goddess Athena, the protector and patroness of the city. The second largest festival was in honor of god Dionysus and it consisted of a number of longer and shorter festivities called Dionysia. Anthesteria were also dedicated to Dionysus and Lenaia were festivals dedicated to Dionysus Lenaius. In honor of Apollo, Greeks organized Boedromia and the Pythian Games held in Delphi. The Pythian Games were actually the best known of all music festivities in Classical Greece where different musical and athletic competitions were taking place. Of course the Olympic Games were also an example of a great festivity, actually the biggest sports event in antiquity that included music in different forms and was connected to the worshipping of gods. In honor of Apollo and goddess Artemis, Greeks celebrated Thargelia and in honor of Aphrodite and Adonis, Adonia. Adonia was actually a festival attended only by women, as well as Skira and Thesmophoria in honor of goddess Demeter and her daughter Persephone. In addition to the above, there were also Hermaia, a festival dedicated to god Hermes. The amount of religious festivals and the frequency in which they occurred, give an additional image of how much present music was in Greek people’s lives. It seems like there was hardly a day in the life of a Greek of the Classical period without music.

⁴⁷ LSJ s.v. 'στάμνος', 1633.

2.3 Music and mathematics

Music was not only interpreted as sound, text and movement in daily life but it was functioning as a science as well. This scientific approach started by Pythagoras of Samos. Since the time of Pythagoras, the theory of music was a science of the *corpus* (lit. “a collection of written material”) of the mathematical sciences.⁴⁸ From Pythagoras derived the science of the numerical laws governing music⁴⁹ and this science consisted of two parts, intervals (harmonics or canonic with numerical relationship analyses between the intervals of a musical scale) and rhythm (combination of sound duration), that I am not including in my research. This approach to music helps understand that music was not a simple case in Classical Greece and in antiquity in general, but a multidimensional conception.

3 Musicians of Classical Greece

In order to analyze the theme of a musician in Classical Greece, I want to start from a closer approach to the word “musician”. The equivalent translation of the English word “musician” in Greek is *mousikos*, presented above in Chapter 2. The word *mousikos* appears actually twice in Plato’s *Republic*,⁵⁰ which is the central source and starting point of my research.

When we refer to musicians of ancient Greece, we do not find the usage of this term in masculine form before the 4th century BCE at all. This is because *mousikos* appeared as a term when music became a completely autonomous and an independent art during the 4th century BCE.⁵¹ Before the introduction of the term *mousikos*, there were numerous other terms in use to describe someone closely associated with music according to the nature of the activity with which they were engaged. In this chapter I present the terms used in order to describe the musicians, before the term *mousikos* came into use in the Classical texts and other surviving archaeological finds.

Musicians were not only musical instrument players and singers, but also poets, dancers, composers, teachers and performers in general and this provides us with a large number of substantives used in order to name them. For the purposes of this study, I use the English word “musician” when I refer to all of the individuals practically – and not

⁴⁸ Marrou 1956, 189.

⁴⁹ Marrou 1956, 249–250.

⁵⁰ Plat. *rep.* 398e1 and 402d8.

⁵¹ Michaelides 1978, 214.

theoretically – interfering with music before, during and after the 4th century BCE, either professionals or amateurs. It is also important to mention here that even after the appearance of the term *mousikos*, it didn't automatically mean only musician as a performer, singer, teacher, player but also a specialist. As Anderson⁵² emphasizes referring to the term *mousikos*, during the latter half of the 5th century BCE, this term begins to denote not a musician but an expert in the theoretical aspects of melody and rhythm and it was eventually used as an epithet par excellence of Aristotle's brilliant pupil Aristoxenus.⁵³

When it comes to male musicians before the 4th century BCE, they were called by a variety of names. Starting from the Dark Ages and the recitation of epic poetry, we meet the terms *aoidos*⁵⁴ and *rhapsoidos*,⁵⁵ the first meaning the singer of epic poems and the second the reciter (the one who sewed verses together). The term *poietes*⁵⁶ was used to describe the composer of music, as music and poetry were so strongly connected to each other. As I mentioned in Chapter 2, during the Classical period in Athenian schools, music was taught to young boys by a *kitharistes*, but there was also another term, that of *kitharodos*,⁵⁷ literally meaning the one who plays the *kithara* and sings simultaneously. In accordance to the instrument played, there was also the *auletes*⁵⁸ (lit. “*aulos* player”) and the *aulodos*⁵⁹ (lit. “one who sings to the *aulos*”). Other terms used were the *orchestes*⁶⁰ (lit. “male dancer” and later especially “pantomimic dancer”), the *choreutes*⁶¹ (lit. “choral dancer”), the *chorodidaskalos*⁶² (lit. “chorus trainer”) and the *mousopoios*⁶³ (lit. “lyric poet”). For women musicians, Greeks also used the terms *aoidos* and *rhapsoidos*, as they were both masculine and feminine in grammatical gender, *auletris*⁶⁴ or *auletria*⁶⁵ (lit. “female *aulos* player”), *psaltria*⁶⁶ (lit. “female harper”), *kitharistria*⁶⁷ and *kitharistris*⁶⁸ (lit. “female *kithara* player”), *orchestria*⁶⁹ or *orchestris*⁷⁰ (lit. “dancing girl”) and *poietria*⁷¹ (lit. “poetess”).

⁵² Anderson 1994, 142.

⁵³ For Aristoxenus of Tarentum see section 3.1.

⁵⁴ LSJ s.v. 'ᾠιδός', 172.

⁵⁵ LSJ s.v. 'ῥαψωδός', 1566.

⁵⁶ LSJ s.v. 'ποιητής', 1429.

⁵⁷ LSJ s.v. 'κιθαρωδός', 951.

⁵⁸ LSJ s.v. 'αὐλητής', 276.

⁵⁹ LSJ s.v. 'αὐλωδός', 277.

⁶⁰ LSJ s.v. 'ὀρχηστής', 1258.

⁶¹ LSJ s.v. 'χορευτής', 1998.

⁶² LSJ s.v. 'χοροδιδάσκαλος', 1999.

⁶³ LSJ s.v. 'μουσοποιός', 1149.

⁶⁴ LSJ s.v. 'αὐλητρίς', 276.

⁶⁵ LSJ s.v. 'αὐλήτρια', 276.

⁶⁶ LSJ s.v. 'ψάλτρια', 2018.

⁶⁷ LSJ s.v. 'κιθαρίστρια', 951.

⁶⁸ LSJ s.v. 'κιθαριστρίς', 951.

The above realization brings immediately forward a very complex situation, because in order to fully examine the musicians of the 5th century BCE, when the word *mousikos* was not yet in use, one should examine one by one all the terms used to describe male and female individuals who interfered with music during that period. These terms appear in the Classical texts available to us (unfortunately some of them corrupted) and other archaeological finds such as vase paintings and engravings on non-organic material (stone, marble, metal, ceramic etc.). For the purposes of my research, I use the available published literature that already refers to these sources, although I am not aware of the fact that these sources would have been examined one by one in their entity by scholars. We know that unfortunately the amount of archaeological evidence is not sufficient and fully reliable and that we have mainly fragments of works in our hands. This automatically means that we cannot form a whole or even satisfactorily representative image of what were the musicians of Classical Greece like and answer to all of the sub-questions that are linked to the main question. As Marrou points out, we know, for example, very little about how music was taught in antiquity.⁷² The vase paintings show us a direct way of teaching, without writing anything down as a teacher is sitting with a young student face-to-face and playing the lyre (see Fig. 1b). There is at least some evidence that music teachers received a very good pay⁷³ even during the times when the status of music in education had declined, giving its way to literature. In a school of the 2nd century BCE, there would be three teachers of literature, but only one teacher of music, who would still get a better salary than the others⁷⁴ (700 drachmae a year, 100-200 drachmae more than his colleagues). As we see, the fragmentary and limited availability of sources renders the study of musicians in Classical Greece complicated.

As far as professionalism and amateurism in music are concerned, until the 5th century, we do not have a clear image of what were the limits between a professional and an amateur musician. The image we can form from the available sources is that almost every citizen of the Greek city-state was exposed to music in one way or another. With the beginning of the 5th century, we know that there were professional musicians in Classical Greece and the most famous of all was Pindar, the most eminent Greek lyric poet. His contemporary, the lyric poet Simonides of Ceos, was also a very popular professional musician. Fame was interpreted not

⁶⁹ LSJ s.v. 'ὄρχήστρια', 1258.

⁷⁰ LSJ s.v. 'ὄρχηστρίς', 1258.

⁷¹ LSJ s.v. 'ποιήτρια', 1429.

⁷² Marrou 1956, 189.

⁷³ Marrou 1956, 193.

⁷⁴ Dittenberger, SIG 578, 9; 13; 15 and Marrou 1956, 193.

only into recognition but in a high pay, as well. Pindar and Simonides were the highest paid musicians we know so far from the Classical age – although we do not know the exact sums of money they were paid – and received many rewards and a lot of praise. About the status of professional musicians in society, there is a categorization to three groups made by Kemp.⁷⁵ Kemp divides them in 1) the famous poet-musicians, great composers, who were known throughout the Greek world (like Pindar), 2) the skillful musicians, who were not great composers, but their high reputation depended on a skillful performance, either singing or instrument playing, for example Pronomus of Thebes (fl. c. 440 BCE), Chrysogonous (fl. c. 410 BCE), Antigenidas (Hellenistic period, contemporary of Alexander the Great) and Ismenias (Hellenistic period, contemporary of Alexander the Great) – all of whom were *aulos* players, and 3) the professional musicians who were making a living on music without aiming for fame (for example music teachers and even musicians of lower status such as triremes rowers and *symposia* players).

Apart from the numerous religious festivals presented in Chapter 2, there were musical festivals as well. These festivals specialized only on musical performances and contests. The famous Panathenaia in Athens, Carnea and Gymnopedias in Sparta and the festivals of Apollo in Delphi and Delos are very important among these festivals. The musicians who took part in musical festival competitions, were probably on a professional level that allowed them to compete with others. We have evidence of *kitharistes*, *kitharodos*, *auletes* and *aulodos* contests. The contest prizes would be metal, oil or a certain amount of fame in society.

There is something more I want to point out, before proceeding to the section about male musicians. Marrou⁷⁶ makes a comment on how we never think of Greeks as musicians while scholars and teachers pay less attention to the music of the Greeks than to their ceramics, adding that Greeks looked upon themselves first and foremost as musicians. I agree with this statement and regarding my personal experience, there is not put appropriate emphasis on ancient Greek music when it comes to teaching. Our focus is mainly on philosophy, rhetoric and history. Unfortunately the archaeological evidence does not help in this matter either, because we do not have enough well-preserved sources that could lead us to reconstructing a more reliable image and sound of the Greek antiquity. The few contemporary sources available were presented in Chapter 2 and significant effort is being made by ancient Greek music enthusiasts and classicists around the world, as I present in chapter 6 in detail.

⁷⁵ Kemp 1966, 217–219.

⁷⁶ Marrou 1956, 69–70.

3.1 Male musicians

If someone would wonder which one of the two gender categories – male or female – was predominantly engaging with music in Classical Greece, the answer would be “Men”, because of the fact that boys had access to education at least from the age of 6 or 7. Just a single look at the vase paintings preserved thanks to archaeological excavations or even accidental discoveries, will also help confirm the above answer. If we have a more careful look onto the famous vase paintings of the Classical period in the list of figures, the majority of them depict male musicians. This has caught my attention since the beginning of this study.

The Duris vase (see Fig. 1a and 1b) depicts male teachers and boys during a school day. I present in section 2.1 how Athenian education was male-dominated or better, addressed entirely to boys. The Athenian *stamnos* (see Fig. 2a and 2b) shows a young man named Sosiphos playing the *aulos* while on the other side of the *stamnos* another young man is holding a *lyra*. On the Athenian *hydria*⁷⁷ (lit. “water-pot”) a man in patterned *chiton*⁷⁸ (lit. “man’s sleeveless tunic”) is playing the *kithara* (see Fig. 3). On the Athenian *pelike*⁷⁹ (lit. “a type a ceramic wine jar”), a man again in *chiton* is playing the *kithara* on a platform (see Fig. 4a) while on the other side we see two dressed men, one playing the double *aulos* and the other one singing on a platform (see Fig. 4b). Last but not least, we have the renowned Pronomus vase (see Fig. 5), depicting the most celebrated *aulos* player of the Classical period, Pronomus of Thebes. Pronomus is sitting in the center of the rehearsal room wearing an ornate robe and a garland on his head and playing the double *aulos*. He is sitting among actors, all in theatrical costumes with some of them holding theatre masks. In front of him, there is a young man holding a *lyra*. Pronomus was one of the few *aulos* players who became celebrities during the Classical period.⁸⁰

3.1.1 Young male musicians

On vase paintings we can see young men and boys depicted singing, playing an instrument or reciting epic poetry. In Athens, as education was not only the privilege of rich people, also

⁷⁷ LSJ s.v. 'ὕδρεια', 1844.

⁷⁸ LSJ s.v. 'χιτών', 1993.

⁷⁹ *Pelike* was not a term used in ancient Greece, but a term invented by archaeologists. This type of jar was called by other names such as *kylix* or *lekanis*.

⁸⁰ Anderson 1994, 143.

poorer parents could afford to send their boys to school and anyone could learn to play music. At school the boys learnt to sing and play the *lyra* and the *aulos*.⁸¹ In Sparta and Crete there was a more military approach to musical education. The boys were learning to sing *paians* and grandiloquent lyrics and every aspect of musical training was in the scope of manliness and readiness for war.

Apart from the boys' contact with music on an educational level, there was a competition level as well. During the Great Dionysia festival in Athens, each Athenian tribe had to provide two choirs to the festival. One choir consisted of 50 men and the other of 50 boys.⁸² The choirs were singing *dithyramboi* during the festival and they would compete at the same time. The prize of the dithyrambic contests was very important and the competition level was very high.

3.1.2 Adult male musicians

Here we can include all the known male musicians of the Classical period along with the great number of those musicians whose names have not survived or remained anonymous even during antiquity. They were probably teachers, slaves playing in *symposia* or everyday people who were not after fame or recognition in general.

We know several names of eminent male lyric poets and musicians during the early Classical period as Pindar, Simonides of Ceos, Anacreon (c. 582–485 BCE), Bacchylides (c. 518–451 BCE) and Lasus of Hermione (c. 548–middle of the 5th century BCE). I would include in the musicians list Aristoxenus of Tarentum (c. 375–304 BCE), a philosopher and prominent music theorist who provided us with a lot of music theory, but he is referred to as a theorist, not a musician in practice and apart from that, he flourished during the end of the Classical and mainly during the Hellenistic period. Aristoxenus was the first one to analyze octaves, scale systems and pitch keys in the theoretical field of music. Returning to practical musicians, Simonides and Lasus were actually rivals and along with Pindar they formed a strong basis of lyric poetry during the period I am focusing on.

As the beginning of the 5th century BCE gave birth to the third genre of Greek poetry, the drama and its three forms – tragedy, comedy and satyr play – innovations in the field of

⁸¹ The *aulos* lost its popularity in Athens during the Classical period, as I will present in my study. As a result, the teaching of *lyra* was a priority in Athenian schools. *Aulos* was also associated with slaves and people of lower status, which automatically rendered the instrument less popular among those parents who could afford a proper education for their boys.

⁸² Landels 1999, 4.

music started taking place. During drama performances a *choros*,⁸³ a dancing and singing choir usually consisting of 12–15 citizens (24 in comedies), intervened continuously during the performance commenting on the plot, the persons, giving additional information about the story and intensifying the audience's feelings through dancing, talking and singing. When we recall the names of the tragedians Aeschylus (c. 525–456 BCE), Euripides (c. 480–406 BCE) and Sophocles (c. 496–406 BCE) and comedian Aristophanes (c. 445–385 BCE), we realize they were also – not surprisingly – all men. This indicates that male musicians were the dominant gender in music art of the Classical period – if future archaeological evidence and research does not prove the opposite.

3.2 Female musicians

Despite the fact that all nine Muses were given female names, women in Classical Greece do not seem to have a central role in the majority of music activities. Women actually did have their own festivities and there were specific festivals attended exclusively by them: Adonia, Skira and Thesmoforia (see Section 2.2). It is also important to remind, that the role of woman in Greek city-states differed from one place to another. In Athens, girls did not have access to education at all, until the Hellenistic period. They were kept away from learning, but they would be shown by someone how to handle an instrument, sing or dance. We know there were harp, *kithara* and *aulos* female players in Athens. Especially in the case of harps, they were almost exclusively played by women. In addition, women in Athens played music only indoors, therefore it was a domestic activity for them. In Sparta, the other powerful city-state of the 5th century, the situation was different. Girls had access to education and were allowed to interfere more openly with music, sing in a choir and compete.

The first time I read about a female musician in antiquity was in Xenophon's *Symposium*.⁸⁴ The guests were passing from the first part of the *symposium* (*deipnon*) to the second (*potos*), with libations and singing *paians*, when a man from Syracuse entered the room boasting about having with him a girl playing the *aulos*, a dancing girl skilled in acrobatics and a very handsome boy skillful in *kithara* playing and dancing. This is some evidence of how young boys and girls were contributing to the entertainment of guests in these drinking-parties. We know overall that women were mostly associated with dancing,

⁸³ LSJ s.v. 'χορός', 1999.

⁸⁴ Xen. *symp.* 2, 1–22.

singing in a choir and playing a musical instrument to entertain others rather than creating poetry. In *symposia*, the so-called flute-girls who played the *aulos* and the dancing girls (see Fig. 6, 7 and 8), were actually slave girls with a low status, who received a very low pay for their performance. They would often perform nude and their contribution was entertaining with a hint of erotic entertainment as well. In figure 6, a dancing girl is entertaining a *symposium* guest. In figure 7, a girl is playing the double *aulos*, while men enjoy themselves playing the *kottabos* game. In figure 8, a woman is playing the double *aulos*. This is believed to be a *symposium* scene as well.

3.2.1 Young female musicians

During the 7th century Sparta, Alcman's⁸⁵ (fl. c. 7th century BCE) poem *Partheneion* (lit. "the maiden song") was sung by young girls. There were choirs of girls competing in music contests or even mixed choirs of girls and boys. On the island of Lesbos there was the famous school of Sappho (c. 630–570 BCE), where instruction in *lyra* playing, singing and dance were part of the school curriculum.⁸⁶ This was not the case during the Classical period with girls not having access to education in powerful Athens. Their role would be limited to dancing, playing an instrument (see *auletria*, *psaltria* and *kitharistria* in Chapter 3) for entertainment purposes with a low pay if any and they would often be slave girls. In figure 6,⁸⁷ we see again the girl dancing for a laying *symposium* guest. The fact that her hair is cropped indicates that she is a slave. Towards the end of the Classical period, we have evidence of girls who would also dance by the sound of a type of *aulos* called *parthenios*⁸⁸ (lit. "girl-type") that accompanied their dance. As we pass from the Classical to the Hellenistic period, the role of women in Greek society changes and girls have access to education.

3.2.2 Adult female musicians

Some vase paintings show us that certain musical instruments were played by women, for example the harps were handled almost entirely by female players. Women were members of

⁸⁵ Alcman was a contemporary of Sappho (c. 630–570 BCE) from Sparta, who composed choral poetry. He lived during the 7th century BCE.

⁸⁶ Lippman 1964, 60.

⁸⁷ This painting is attributed to Brygos, one of the best known red-figure vase painters of the Classical period.

⁸⁸ The classification of the *auloi* was made by music theorist Aristoxenus.

the *choros* in drama performances, but their task would be limited to movement and dancing – not singing – in front of the audience. Musical instrument playing was limited to an indoors activity and there is no archaeological evidence of famous women musicians of the Classical period in Athens at all. In Sparta, women had access to education, but the Spartan ideal of a war-ready citizen, did not give space to music and artistic creativity. Spartan women received mostly physical training and as far as music activities were concerned, they were taking part into singing activities as choir members. This works as evidence of the fact that the role of woman in Classical city-states differed from one another.

Before the Classical period, the status of female musicians was not as low. During the 7th century there was Sappho, the most significant female lyric poet of antiquity, a music-teacher and *choros* leader to whom parents sent their daughters for education. There was also Telesilla of Argos, whose creative period is considered around the end of the 6th century. During the Classical period there were some female musicians outside Athens, whose names are preserved. There was Praxilla of Sicyon, a lyric poet who flourished during the middle of the 5th century and Corinna of Tanagra who is believed to be a contemporary of Pindar and actually his teacher. Corinna is considered the second most significant female poet of antiquity after Sappho. Considering the above, it seems like the interference of women with music gradually declined from Archaic to Classical period.

4 The musical instruments of Classical Greece

When we refer to ancient musical instruments we think of objects that are either built by human hands or found solid in nature and are used in order to produce sound mainly for artistic purposes. For example, a wooden flute is an instrument built by human hands, whereas a war horn is found solid in nature and is used for producing sound after a short processing of the material. However, before beginning the classification of the musical instruments of ancient Greece in this chapter, it is significant to make a reference to the most natural musical instrument for a human being, which is the human voice.

It wasn't long ago, when during the class of Introduction to Language Research in the University of Helsinki, professor Tapani Kelomäki asked a simple question: "*Why do you think man started speaking?*". The answer was simpler than we thought: "*Probably because man had an inbuilt need to sing*". As Anderson⁸⁹ points out, perhaps the first and certainly the

⁸⁹ Anderson 1966, 2–3.

most basic of all musical instruments is the human voice, adding that the system of tonic accent that the Greek language had was distinguished by actual variations in pitch, a rising and falling of the voice. The Greek language thus, contained its own melody, the “speech melody”. Spyridis⁹⁰ has written about the musicality of the ancient Greek language with references to Aristoxenus of Tarentum who has analyzed the movement of the voice during singing and speech in his work *Elementa Harmonica* (c. 300 BCE). West⁹¹ dedicates a whole chapter to “The Voice” as a musical instrument of its own. Musical instruments were played also without a singer or a choir, but most of the times they were played in order to accompany a human voice or a number of them. According to West⁹² Greeks – as far as we know – did not use their voice in order to hum, yodel, imitate bird or animal cries, or croon wordlessly, but their songs were settings of thoroughly articulate, often highly sophisticated poetic texts, with little verbal repetition. This means – West continues – how significant it was for the words to be clearly heard and not get covered by the sound of the instruments. Someone would sing alone without an instrument or with the accompaniment of one instrument but there were also choirs of 50 members accompanied by one *aulos* or a choir of 600 men accompanied by 30 *kithara* players.⁹³ Therefore, there were many variations in the number of singers and instruments. The indications we have overall, are that the early Greek singing style was not characterized by any special mannerisms.⁹⁴ On the contrary, Sachs⁹⁵ states that the Greek singer’s primitive singing was unnatural and seasoned with strange, unwonted mannerisms. Whatever the case is, one cannot doubt that the human voice was an important musical instrument in ancient Greece.

Before proceeding to the classification of the musical instruments until the end of the Classical period, it is important to point out that all of the instruments used in Greece were of foreign origin. Sachs⁹⁶ stresses that no instrument originated in Greece. In Strabo’s *Geographica* this is also indicated by the barbarian names used for some of them as *barbitos*, *magadis*, *nablas* and *sambyke* as we will see below. Therefore, the ancient Greek musical instruments known to us today, were imported from non-Greek areas and were probably further developed on Greek ground.

⁹⁰ [Spyridis 2002, 1–7 \(see p. 4\).](#)

⁹¹ West 1992, 39–47.

⁹² West 1992, 39.

⁹³ West 1992, 41.

⁹⁴ West 1992, 45.

⁹⁵ Sachs 1977, 85.

⁹⁶ Sachs 1940, 128.

The only present knowledge we have of the musical instruments of ancient Greece is from literature, illustrations on pottery and statuary and also archaeological finds. This knowledge is sufficient in order to classify those instruments. A global system of classifying musical instruments was developed and introduced in 1914 by German musicologist Curt Sachs⁹⁷ and Austrian musicologist Erich Moritz von Hornbostel.⁹⁸ This is known as the H-S System, a system that divides musical instruments into 4 categories: the idiophones, the aerophones, the membranophones and the chordophones. For the purposes of this research though, I will use a simple classification of the musical instruments into 3 categories. This simple classification method is closer to the western way of categorizing musical instruments and is similar to the classification used by West.⁹⁹ I will divide the instruments into 3 categories, the stringed instruments, the wind instruments and the percussion instruments. As West¹⁰⁰ points out, this classification also complies with the classification recognized by some ancient writers. D'Angour¹⁰¹ (see Chapter 6) says there were basically 2 families of instruments in ancient Greece, the stringed instruments and the double pipes (*auloi*). Perhaps this simplification is due to the fact that percussion instruments played a comparatively slight part in ancient Greek music.¹⁰²

4.1 Stringed instruments

The stringed instruments or *enchorda organa*¹⁰³ (lit. "stringed instruments") was a large category of musical instruments with different forms, sizes, names and sound. Along with the name *enchorda*, Michaelides¹⁰⁴ provides us with a variety of other names that describe the category of the stringed instruments. These names are *krouomena*¹⁰⁵ (lit. "struck"), *entata*¹⁰⁶ (lit. "stretched"), *plettomena*¹⁰⁷ (lit. "struck") and *epiPLETTOMENA*¹⁰⁸ (lit. "struck"). These instruments were played either with the fingers or with a *plektron*¹⁰⁹ (lit. "plectrum") held in

⁹⁷ Curt Sachs (1881–1959).

⁹⁸ Erich Moritz von Hornbostel (1877–1935).

⁹⁹ West 1992, 48–128.

¹⁰⁰ West 1992, 48.

¹⁰¹ [Armand D'Angour, "The Secrets of Ancient Greek Music: Taster \(2014\)".](#) (YouTube video).

¹⁰² West 1992, 122.

¹⁰³ LSJ s.v. 'ἔγχορδος', 476 and 'ὄργανον', 1245.

¹⁰⁴ Michaelides 1978, 98.

¹⁰⁵ LSJ s.v. 'κρούω', 999–1000.

¹⁰⁶ LSJ s.v. 'ἐντατός', 574.

¹⁰⁷ LSJ s.v. 'πλήσσω', 1421.

¹⁰⁸ LSJ s.v. 'ἐπιπλήσσω', 651.

¹⁰⁹ LSJ s.v. 'πλήκτρον', 1418.

the right hand, or combining the use of a *plektron* and the player's fingers. The *plektron*¹¹⁰ was a hard and solid tool made of hard wood, or other materials such as ivory, metal or horn and it was made by a *plektropoios* (πληκτροποιός), a *plektron* maker. It first appears in surviving vase illustrations around 700 BCE (see Fig. 9) and is not mentioned at all in the two Homeric epics.¹¹¹ In the illustration of figure 9, an Attic *amphora*¹¹² (lit. "jar") from the early Classical period is depicting the god Apollo playing a box lyre by muting the strings with his left hand fingers and strumming them with the *plektron* held in his right hand fist. The *plektron* is attached to the instrument with a cord, as it is usually visible in vase paintings. The Greeks did not know the use of the bow,¹¹³ so fingers and plectrums seem to be the only means of playing the stringed instruments.

The stringed instruments are usually divided into three categories by scholars. This is the classification method I also apply in this research. The categories are: the lyres, the harps and the lutes. These instruments were in use in Mesopotamia before 2000 BCE and became known to Western Asia and the Eastern Mediterranean in the second millennium.¹¹⁴ The Greek instruments visibly resembled these oriental models, but they had their own history and characteristics. A basic, visible characteristic of each of the three categories can be given here in order to perceive a representative image of each one of them. The Greek lyres were a big family of stringed instruments with the same string length, whereas the harps had strings of different length. Finally the lutes were the necked instruments similar to a contemporary guitar.

4.1.1 The lyres

The lyre is a very old stringed instrument and it appears for the first time in Megiddo, Israel in c. 3100 BCE. The lyre was an oriental instrument known to the Sumerians, the Hittites, the Egyptians, and the Babylonians.¹¹⁵ As a matter of fact these foreign lyres were rectangular, asymmetrical and with strings of unequal length whereas the Minoan and Mycenaean lyres we know from surviving art illustrations were symmetrical and round.¹¹⁶ Thus, the lyres of the Greek world were stringed instruments with strings of the same length, but of different

¹¹⁰ Michaelides 1978, 260. (Michaelides uses the transliteration *plectron*).

¹¹¹ Anderson, 1994, 36.

¹¹² LSJ s.v. 'ἀμφορεύς', 95.

¹¹³ Michaelides 1978, 98.

¹¹⁴ West 1992, 49.

¹¹⁵ West 1992, 49.

¹¹⁶ West 1992, 49.

thickness, bulk and tension (referring again to strings). The strings were usually made of twisted gut¹¹⁷ with a special handling of the intestines of animals.¹¹⁸ There is a probability that the material used for the earliest strings was hemp.¹¹⁹ *Lyra* strings were made of hemp, linen and sinew¹²⁰ (lit. “tendon), a cord or band of closely packed fibers attached to a muscle.¹²¹ Sinew is also mentioned in Homer¹²² as *neure*¹²³ or *neuron*,¹²⁴ meaning the bull’s sinew used to make bowstrings. In addition, a common characteristic of the lyres was the two arms (made of wood or horn) attached to a sound-box. It is also pointed out that the lyres were held always on the left side of the player’s body.¹²⁵ The lyre enjoyed a great prestige and it was the only regularly played instrument by an Olympian god, Apollo.¹²⁶

Lyre is the musical instrument family that is mentioned the most in Homer and Hesiod¹²⁷. Sachs¹²⁸ calls lyre the chief, the divine instrument. There are a number of names of instruments in Greek literature that are associated with the Greek lyres. These names are: *lyra*¹²⁹, *chelys*¹³⁰, *chelynna*¹³¹, *barbitos*¹³², *phorminx*¹³³, *kithara*¹³⁴ and *kitharis*.¹³⁵ West¹³⁶ is actually dividing these lyres into two types: the box lyres and the bowl lyres. This distinction is quite practical and easy to observe with the naked eye as some of these instruments’ sound-box was rectangular, round or square in shape (the box lyres *phorminx* and *kithara*) and the others’ was of a standard type or with long arms (the bowl lyres *lyra*, *chelys* and *barbitos*).

The stringed instrument that I will present first in this study is also called the national instrument of ancient Greece and it was an instrument of great importance and fame: the *lyra*

¹¹⁷ Barker 1984, 4.

¹¹⁸ A video that shows the contemporary procedure of gut string production might be similar to some extent to the techniques used in antiquity: [How It's Made, "How It's Made Gut Strings"](#). (YouTube video).

¹¹⁹ Sachs 1940, 131.

¹²⁰ Michaelides 1978, 190.

¹²¹ Anderson 1994, 174.

¹²² Hom. *Il.* 4.122, 8.309, 15.313, 16.316, 21.113.

¹²³ LSJ s.v. 'νευρή', 1170.

¹²⁴ LSJ s.v. 'νεῦρον', 1170–1171.

¹²⁵ Barker 1984, 4.

¹²⁶ West 1992, 50.

¹²⁷ Anderson 1994, 36.

¹²⁸ Sachs 1940, 129.

¹²⁹ LSJ s.v. 'λύρα', 1066.

¹³⁰ LSJ s.v. 'χέλυσ', 1987.

¹³¹ LSJ s.v. 'χελύinna', 1987.

¹³² LSJ s.v. 'βάρβιτος', 306.

¹³³ LSJ s.v. 'φόρμιγξ', 1951.

¹³⁴ LSJ s.v. 'κίθαρα', 950.

¹³⁵ LSJ s.v. 'κίθαρις', 950.

¹³⁶ West 1992, 50.

(see Fig. 10¹³⁷). It is important to make a clarification concerning the word *lyra* and the instrument family called the lyres. Lyres appear in the Homeric epics whereas the term *lyra* does not. Instead of the stringed instrument *lyra*, the Homeric epics refer to *kitharis*, *kitharistys* and *phorminx* as we will see below. According to the Homeric hymn to Hermes, the tortoiseshell *lyra* was invented by Hermes on the day of his birth.¹³⁸ The names *chelys* and *chelynna* are actually used to describe this particular type of *lyra* made from a tortoiseshell, as *χέλυς* and *χελύννα* mean “tortoise”. The popularity of this instrument can be also partly justified due to the fact that it was easy to build and did not require a high level of craftsmanship, but it could be put together by anyone even a lonely herdsman. In illustrations *lyra* appears in contexts such as dancing, school scenes, myths, *symposia*, religious and domestic context and it was an ordinary instrument of non-professional musicians.¹³⁹ Beginners and amateurs made use of this instrument which originated in the round Syrian lyre, although the Greeks believed it was a Thracian invention.¹⁴⁰ The *lyra*’s arms were originally made of animal horns (*kerata*)¹⁴¹ but wooden arms became popular later. The fact that the term *lyra* does not appear in the Homeric epics is probably an indication that *lyra* was not known or used during the pre-Homeric and Homeric times.

Barbitos (also called *barbiton*¹⁴²) is called the *lyra*’s ‘big brother’.¹⁴³ The reason is apparently due to the fact that this instrument had longer and narrower arms than the standard *lyra* (see Fig. 11a and 11b¹⁴⁴), so it was considered as a variety of the *lyra*.¹⁴⁵ The arms bend towards each other and then rise upwards again at a 90° angle.¹⁴⁶ The strings were longer and this gave the instrument a lower pitch and softer tone than the *lyra*.¹⁴⁷ Other names used for

¹³⁷ In this illustration Apollo is sitting on a stool and strumming on a tortoiseshell *lyra* with his left hand. With his right hand he is pouring a libation from a cup.

¹³⁸ Hermes built the instrument using the hollow shell of a tortoise he encountered and made seven strings from sheep gut. On the same day, as he was craving for meat, Hermes managed to steal the cattle of his brother Apollo. Apollo became furious, but after the intervention of Zeus, he managed to get back his cattle. In order to soothe Apollo’s anger, Hermes played the *lyra* and sang to his brother before offering the *lyra* to him as a present. Apollo was enchanted by the sound of the instrument and welcomed the *lyra* that became the symbol of the Olympian god.

¹³⁹ West 1992, 56–57.

¹⁴⁰ Sachs 1940, 131.

¹⁴¹ Anderson 1994, 173–174.

¹⁴² The instrument was more often called by the name *barbitos*, in masculine and feminine form (ὁ/ἡ βάρβιτος) but also *barbiton*, in neuter form (τὸ βάρβιτον), see Michaelides 1978, 48.

¹⁴³ Landels 1999, 21.

¹⁴⁴ In this illustration Alcaeus and Sappho are each holding a *barbitos* in the left hand and a *plektron* in the right hand. The difference of arm length and shape between the *lyra* in Figure 10 and the *barbitos* is obvious.

¹⁴⁵ see Michaelides 1978, 48–49.

¹⁴⁶ This is doubted by Peter Pringle in a very recent research posted in May 2020. For more details about this research see Chapter 6.

¹⁴⁷ West 1992, 57–58.

barbitos or *barbiton* in literature were *barmos* (βάρμος), *baromos* (βάρωμος) and *barymiton* (βαρύμιτον). It was believed to have been invented either by lyric poets and musicians Terpander (c. 712–645 BCE) or Anacreon. Both explanations of the instrument's invention appear in Athenaeus (c. 170–223 CE). In Athenaeus, according to Pindar,¹⁴⁸ the inventor of the *barbitos* was Terpander, but according to Neanthes¹⁴⁹ it was an invention attributed to Anacreon.

Phorminx is the musical instrument mentioned most frequently in the Homeric epics. It appears to have been the oldest stringed instrument in ancient Greece and it is associated to the epic singers (*aedoi*). Homer uses two names for the stringed instruments: *phorminx* and *kitharis*. *Kitharis* is an older form of the word *kithara* and it was used by post-Homeric writers who wanted to sound archaic.¹⁵⁰ According to Anderson,¹⁵¹ in Homer *kitharis* and *kitharistys*¹⁵² appear in three passages of the *Iliad* (*Il.* 1.153, 2.600, 3.54) meaning “lyre” and “lyre playing”, but the rest of the Homeric epics use the term *phorminx*. As a matter of fact, there is no reference of the terms *kitharis* or *kitharistys* in the passage 1.153 of the *Iliad*. On the contrary there is one reference of the term *kitharis* as *kitharin* (κίθαριν in the singular accusative form) in the passage 1.153 of the *Odyssey*. I assume that Anderson meant the *Odyssey* when he referred to the passage 1.153 of the *Iliad*. The third passage of the *Iliad*, where the term *kitharis* appears as *kitharin* (κίθαριν, again in the singular accusative form), is 13.731. In addition to the above there is a verb *kitharize* (κίθαριζε) in 18.570. As far as the *Odyssey* is concerned, the term *kitharis* appears also in passages 1.159 and 8.248 along with passage 1.153. To sum up the above, the terms *kitharis* and *kitharistys* appear overall 6 times in the Homeric epics (*Il.* 2.600, 3.54, 13.731 and *Od.* 1.153, 1.159, 8.248).

Returning to *phorminx*, this stringed instrument is called by scholars the forerunner of the *kithara*¹⁵³ but according to Sachs¹⁵⁴ Homer's type of lyre (the *phorminx* and *kitharis*) was unmistakably a *kithara*. Sachs adds that the names *phorminx* and *kitharis* were later replaced by new terms *kithara* and *lyra* to describe new types of lyres. The *phorminx* could be described as West¹⁵⁵ classifies it “a round-based box lyre” as it is illustrated in art of the

¹⁴⁸ Athen. XIV, 635d, ch. 37.

¹⁴⁹ Athen. IV, 175e, ch. 77.

¹⁵⁰ Landels 1999, 47.

¹⁵¹ Anderson 1994, 36.

¹⁵² LSJ s.v. 'κίθαριστύς', 951.

¹⁵³ Landels 1999, 1.

¹⁵⁴ Sachs 1940, 130.

¹⁵⁵ West 1992, 50.

Mycenaean period, late 8th and 7th century BCE.¹⁵⁶ In the Classical period this type of round-based box lyre is called a cradle-*kithara* (see Fig. 12a¹⁵⁷) or a cylinder *kithara*.¹⁵⁸ The cradle-*kithara* or cylinder *kithara* was the most direct descendant of the *phorminx* in terms of shape and structure.¹⁵⁹

The lyres were very popular instruments during the Classical period. We know that children were taught music at school or at home and the basic instrument they were taught was the lyre. There were many types of lyres but the most advanced of them was the *kithara*. *Kithara* was the lyre for professional musicians and the highest art was singing and playing the *kithara* while the second was playing the *aulos*¹⁶⁰ (see Subsection 2.2.1). In most vase illustrations they are seven-stringed but many musicians used *kitharas* with more strings. The term *kithara* appears in the early 5th century BCE¹⁶¹ and replaces the archaic *kitharis* used in the *Iliad*. This is a possible indication that the *kithara* of the Classical period was a different version of the older *kitharis*. *Kitharis* is described as a primitive kind of lyre, identified by some scholars with the *lyra* or *phorminx* and by others as Sachs with the *kithara*. As we saw above, it was classified by West as a type of box lyre. Michaelides¹⁶² describes it as a more perfected and more detailed type of *lyra*.

Kithara was a more massive instrument than the standard lyre type. It was heavy and solid with strong arms and it was played by grown adults, not boys or girls. Due to its weight, it was held in almost a vertical position or leaning towards the player, but not forward¹⁶³ (see Fig. 13a and 13b¹⁶⁴). In *Politics* Aristotle calls the *kithara* a professional instrument (*ὄργανον τεχνικόν*) unsuitable for general education use.¹⁶⁵ It was indeed the instrument of the professional musicians in Classical Greece and more specifically the *kitharistes* (*κιθαριστής*) and the *kitharodos* (*κιθαρωδός*). The female equivalents were *kitharistria* (*κιθαρίστρια*), *kitharistris* (*κιθαριστρίς*) meaning a female *kithara*-player and *kitharodos* (*κιθαρωδός*) as well. During the Classical period in Athenian schools, music was taught to young boys by a

¹⁵⁶ Barker 1984, 5–6.

¹⁵⁷ Muse Terpsichore in the middle is playing a type of harp. Behind her a cradle-*kithara* is hanging. On the right, the poet Musaeus is holding a tortoiseshell *lyra*.

¹⁵⁸ For more about the cylinder *kithara* see Lawergren 1984, 147–174.

¹⁵⁹ Barker 1984, 14.

¹⁶⁰ [Professor Chill, “Blasts From The Past Music in Ancient Europe”](#). (YouTube video).

¹⁶¹ West 1992, 50–51.

¹⁶² Michaelides 1978, 168–169.

¹⁶³ Sachs 1940, 130; Michaelides 1978, 168.

¹⁶⁴ A young man is singing and playing the *kithara* using his left hand and a *plektron* in his right hand. This is the type of *kithara* that West calls square-based or standard type and it is visibly different than the round-based *phorminx* or cradle-*kithara*.

¹⁶⁵ West 1992, 54.

kitharistes. The professional *kitharodos* who played and sang simultaneously competed in big contests, in the Olympic and Pythian Games or other festival competitions such as the Panathenaia. It required a lot of skill to play this instrument and it accompanied epic recitations, dances, lyric songs, rhapsodies but it was also played solo in competitions, *symposia* and games. The skillful *kithara*-players enjoyed widely fame and admiration in society. In illustrations of the Classical period, Apollo is often shown holding or playing a *kithara* instead of a *lyra* (see Fig. 13c¹⁶⁶).

4.1.2 The harps

*Psalterion*¹⁶⁷ is the generic term in Greek for the family of harps which means “plucked instrument”, but there was also a type of harp called by this name. The term originates from the verb *ψάλλω* (lit. “to pluck”). These instruments were not played with the use of a *plektron*, but the player plucked the strings with the fingers (see Fig. 12a and 12b¹⁶⁸). Harps started being considered as standard stringed instruments in Greece at the end of the 7th century BCE¹⁶⁹ (the lyres were considered standard throughout antiquity). They appear in vase illustrations of the 5th century BCE and they were treated as foreign instruments.¹⁷⁰ Michaelides includes in the *psalterion* category the following instruments: *epigoneion*,¹⁷¹ *magadis*,¹⁷² *pektis*,¹⁷³ *simikion*,¹⁷⁴ *sambyke*,¹⁷⁵ *nabla*,¹⁷⁶ and *trigonon*.¹⁷⁷ Unfortunately it is not clear what each of these instruments looked like and an attempt to match them with surviving illustrations has proven frustrating and fruitless.¹⁷⁸ Harps were generally described as many-stringed instruments (polychords), but this does not seem to be the case with all of the above instruments. For example *sambyke* – an instrument imported from Syria or Egypt – is referred to as having a great number of strings, but also as being a four-stringed

¹⁶⁶ Apollo is holding a *kithara* between Artemis and Leto.

¹⁶⁷ LSJ s.v. 'ψαλτήριον', 2018.

¹⁶⁸ Muse Terpsichore (in the middle) is playing a harp. Landels (Landels 1999, 74) points out that the exact name of this particular harp is uncertain.

¹⁶⁹ West 1992, 48.

¹⁷⁰ Barker 1984, 16.

¹⁷¹ LSJ s.v. 'ἐπιγόνειον', 627–628.

¹⁷² LSJ s.v. 'μάγαδις', 1070.

¹⁷³ LSJ s.v. 'πηκτίς', 1400.

¹⁷⁴ LSJ s.v. 'σιμίκιον', 1599.

¹⁷⁵ LSJ s.v. 'σαμβύκη', 1582.

¹⁷⁶ LSJ s.v. 'νάβλα', 1159.

¹⁷⁷ LSJ s.v. 'τρίγωνον', 1818.

¹⁷⁸ Barker 1984, 16; Landels 1999, 74.

instrument.¹⁷⁹ Therefore, the attempt to define the adjective “many-stringed” when we refer to the stringed instruments is proven to be difficult. Barker¹⁸⁰ mentions the possibility that the *sambyke* was not a harp at all, although it is categorized as a many-stringed harp by other scholars.

At least one of the above terms, *magadis*, has recently been identified as not being the name of a specific instrument. Describing *magadis* in the beginning of the 20th century, Sachs¹⁸¹ presents the term as an ancient harp of Lydian origin, adding that *pektis* was sometimes considered to be identical with *magadis* whereas later it was called *sambyke* and was related to the more recent *psalterion*. Michaelides¹⁸² presents *magadis* as a stringed instrument widely known in Greece and also as a wind instrument, the Lydian *aulos*. Barker¹⁸³ presents the confusion associated to *magadis* and the puzzling of whether it is a stringed or wind instrument while arguing that *magadis* represents the performance technique of playing in octaves, not an instrument. Barker was actually the first scholar, who argued about the term in a set of papers handed to a conference held in Italy in 1895.¹⁸⁴ Anderson¹⁸⁵ is referring with doubt to *magadis* as a puzzling stringed instrument. According to Landels,¹⁸⁶ *magadis* is a descriptive adjective that means “able to double (a melody) in octaves” (something like our diapason). Perhaps Landels’ theory about the meaning of *magadis* as “able to double (a melody) in octaves” could finally cease the confusion and uncertainty that surrounds this term.

In the surviving poems of Sappho, the poet calls lyre by the names *chelys*, *chelynna*, *lyra* and *kitharis*. She also mentions twice the instrument *pektis*, but does not provide with further information. Michaelides¹⁸⁷ presents two different *pektis* instruments: a string and a wind instrument that bear the same name. As a stringed instrument it is described as a big instrument of Lydian origin with 20 strings tuned in pairs, introduced by Sappho. As a wind instrument, it was similar to a *syrinx* (“Pan-pipes”) described below in Subsection 4.2.2.

¹⁷⁹ Michaelides 1978, 295. (Also LSJ gives a definition of *sambyke* as a triangular musical instrument of barbaric origin with four strings).

¹⁸⁰ Barker 1984, 16.

¹⁸¹ Sachs 1940, 136.

¹⁸² Michaelides 1978, 195.

¹⁸³ Barker 1984, 293–297.

¹⁸⁴ Barker’s essays were given to the conference “Convegno internazionale su la musica greca antica” held in Urbino, Oct. 18–20, 1985. The material was later published as *La musica in Grecia* in 1988, edited by Bruno Gentili and Roberto Pretagostini. Unfortunately I could not have access to the original work, but the part where Barker refers to *magadis* is probably found in pages 96–107, the one mentioned by Landels (Landels 1999, 279 note 29).

¹⁸⁵ Anderson 1994, 67.

¹⁸⁶ Landels 1999, 41, 45, 46, 74.

¹⁸⁷ Michaelides 1978, 244.

The *epigoneion* was one of the largest many-stringed instruments used in Greece. It had 40 strings and its invention was attributed to musician Epigonus (Ἐπίγονος), who lived during the 6th century BCE.¹⁸⁸ Sachs¹⁸⁹ rejects the story that the instrument was brought to Greece from Alexandria or Ambracia in Epirus by Epigonus, arguing that the etymology of the name *epigoneion* – and not the name of Epigonus – is what defines the instrument. The term consists of the preposition “ἐπί” (lit. “upon”) and the substantive “γόνυ” (lit. “knee”) and it means “a thing on the knees”. Sachs also argues that the explanation of a *simikion* having been invented by a man named Simos is not accepted either. Sachs preferably connects the instrument to the Persian word *sīm* that means “string”. He also mentions that neither *epigoneion* nor *simikion* have been depicted in Greek art. Last but not least, the *trigonon* was a type of harp of Phrygian, Egyptian or Syrian origin and it was usually played by female players.¹⁹⁰ Sachs¹⁹¹ mentions that in literature it was called a Phrygian, Syrian or Egyptian instrument and was probably a variation of the *psalterion*. As it is understood from its name, it had the shape of a triangle with strings of different length.

4.1.3 The lutes

The lutes were a type of stringed instruments extremely rare in Greece and Rome¹⁹². They were necked instruments resembling a contemporary guitar (see Fig. 14¹⁹³). Some lutes were standardized in Greece during the second half of the 4th century BCE.¹⁹⁴ Unfortunately there is limited evidence of lutes in vase illustrations and statuary.¹⁹⁵ The common name of the lute was *pandoura*,¹⁹⁶ but the terms *pandouris* (πανδουρίς) and *pandouros* (πάνδουρος) were also used. This was a foreign name, probably Sumerian, meaning “bow-small”.¹⁹⁷ It was a three-stringed instrument, that’s why the Greeks called it also *trichordon* (τρίχορδον) and it was probably the only necked instrument that Greeks used.¹⁹⁸ Ancient writers called it also Assyrian, Cappadocian and Egyptian instrument.¹⁹⁹

¹⁸⁸ Michaelides 1978, 104.

¹⁸⁹ Sachs 1940, 137.

¹⁹⁰ Michaelides 1978, 342.

¹⁹¹ Sachs 1940, 136.

¹⁹² Sachs 1940, 137.

¹⁹³ A muse is playing the three-stringed lute called *trichordon*.

¹⁹⁴ West 1992, 48.

¹⁹⁵ Barker 1984, 16.

¹⁹⁶ LSJ s.v. ‘πανδοῦρα’, 1297.

¹⁹⁷ Sachs 1940, 137.

¹⁹⁸ Michaelides 1978, 341.

¹⁹⁹ Sachs 1940, 137.

4.2 Wind instruments

The wind instruments of ancient Greece were called *empneusta*²⁰⁰ or *empneustika* (ἐμπνευστικά).²⁰¹ Another name used to describe this category was *epipneomena* (ἐπιπνεόμενα). In antiquity they were usually divided into two groups, those played with a reed and those played by directly blowing into the instrument without the use of a reed. Ancient writers used the generic term *aulos* for the wind instruments played with a reed and *syrinx*²⁰² for those played without a reed.²⁰³ These terms are not just generic, but they are used to describe specific wind instruments as well, the *aulos* and the *syrinx*.

Apart from the instruments used for musical purposes, there were also those that were used to produce sound but not necessarily in music making, accompanying singing voices or competing in music contests. These were the *salpinx*²⁰⁴ (lit. “war-trumpet”) and the horn, called *keras*²⁰⁵ or *bycane*.²⁰⁶ *Salpinx* was known from the Homeric epics²⁰⁷ and it is also mentioned in works of the Classical period, for example in tragedian Sophocles²⁰⁸ (c. 497/6–406 BCE). *Keras* was known during the Classical period as we know from Xenophon’s (c. 430–354 BCE) *Anabasis*, a work composed around 370 BCE and describing historical events that started in 401 BCE.²⁰⁹ The last one, *bycane*, was an instrument used after the Classical period as the name of the instrument implies. The term actually comes from the Latin word *bucina* (lit. “war trumpet”) and the oldest reference of *bycane* is in historian Polybius (c. 200–108 BCE).²¹⁰ In surviving literature there is a long list of terms used to describe the many wind instruments. However, for the purposes of this study the examination will be restricted to the most important of them: the *aulos* and the *syrinx*.

²⁰⁰ LSJ s.v. 'ἐμπνευστός', 546.

²⁰¹ Michaelides 1978, 97.

²⁰² LSJ s.v. 'σῦριγξ', 1731.

²⁰³ see also Michaelides 1978, 97.

²⁰⁴ LSJ s.v. 'σάλπιγξ', 1582.

²⁰⁵ LSJ s.v. 'κέρας', 941.

²⁰⁶ LSJ s.v. 'βυκάνη', 333.

²⁰⁷ Hom. *Il.* 18.219.

²⁰⁸ Soph. *El.* 711.

²⁰⁹ Xen. *an.* 2.2.4.

²¹⁰ Pol. *Hist.* 15.12.2.

4.2.1 The *aulos*

Aulos is an instrument that has caused a lot of argumentation among researchers of ancient Greek music because of its problematic translation. Some scholars translate it as a “flute”, others as an “oboe”. LSJ dictionary translates *aulos*²¹¹ as a “flute”, clarionet and pipe. Marrou²¹² comments that *aulos* was an oboe and it should not be translated as “flute”. Barker²¹³ emphasizes that *aulos* has been misleadingly translated into a “flute” and that it is an instrument resembling a modern oboe. West²¹⁴ also argues that the *aulos* should be classified as an oboe according to the H-S System (see Chapter 2). Landels²¹⁵ argues that a translation into “flute” is extremely misleading and inaccurate, because the *aulos* did not look like a flute and in addition there was already a wind instrument of the flute type in antiquity called *plagiaulos* (πλαγίαυλος), the transverse *aulos*,²¹⁶ which appears in literature during the early Hellenistic period. Thus, according to Landels, the translation “flute” should be used only to describe *plagiaulos* but not *aulos*.

Aulos was undoubtedly the most important wind instrument of Classical Greece²¹⁷ and this is easily understood just by taking a look at the vase illustrations of the period. Figures of gods, satyrs, muses and ordinary people are frequently depicted playing two pipes with finger-holes (see Fig. 8²¹⁸). This was the *aulos* (lit. “tube, pipe”). A set of two pipes played with one or a double reed.²¹⁹ When the player appears with two pipes, we also use the plural form *auloi*.²²⁰ The *auloi* were played almost always as a pair but there was also *monaulos*²²¹ (μόναυλος) a single-piped wind instrument. *Aulos* was mainly connected to the worship and celebrations of Dionysus and it was present in all kinds of ceremonies, in *symposia*, in music contests, in the theatrical drama performances and in all kinds of entertainment activities. The

²¹¹ LSJ s.v. 'αὐλός', 277.

²¹² Marrou 1956, 188.

²¹³ Barker 1984, 14.

²¹⁴ West 1992, 84–85.

²¹⁵ Landels 1999, 24.

²¹⁶ Michaelides 1978, 258.

²¹⁷ Michaelides 1978, 42.

²¹⁸ A girl playing the *aulos* (double pipes). The Metropolitan museum of New York has translated the instrument into “double flute”. This is a translation that could be argued as being inaccurate.

²¹⁹ West 1992, 84. West argues that the evidence of the usage of a double reed we have from art and literature is a determinant factor of how we should classify *aulos* as an oboe.

²²⁰ Nomenclature still puzzles many scholars and researchers as to whether they should use the term *aulos* or *auloi* as an equivalent to double *aulos* or double pipes. It seems that modern scholarship has rejected the “flute” translation and accepted the “oboe”. Nowadays *aulos* is frequently translated as double pipes by researchers Barnaby Brown and Stefan Hagel (see Chapter 6).

²²¹ Barker 1984, 259.

renowned Pronomus vase (see Fig. 5²²²) is depicting the most celebrated *aulos* player (*auletes*, ἀλλήτης) of the Classical period, Pronomus of Thebes. *Aulos* was such a powerful instrument that it could accompany even a chorus up to 50 singers and dancers as in the Athenian dithyramb.²²³ The instrument was played by slaves, street musicians, beggars and shepherds and there were also famous players such as Pronomus, who were taking part in games with expensive equipment made of copper, gold or bronze. The materials used in the production of an *aulos* were reed, wood, ivory, horn, bone, metal or a combination of these.²²⁴

The origins of the *aulos* are not found in Greece and the instrument was not a Greek invention. Anthropologists and music archaeologists²²⁵ have discovered almost 30 000 year-old bone flutes or pipes like the Geißenklösterle flute²²⁶ (nomenclature is problematic, because we don't know how these instruments were played). Concerning the double pipes, this was a very old instrument as well. The earliest European iconographic example of double pipes is a marble statue of a double pipe player from the Cycladic islands dated back to the 3rd millennium BCE (see Fig. 15²²⁷). The oldest archaeological find of the ancient double pipes in the world is the silver pipes of Ur²²⁸ dated back to c. 2450 BCE. Double pipes appear also in Mesopotamian and Egyptian monumental art but it is not known exactly when they were established in the Greek world.²²⁹

The Greeks attributed the invention of the *aulos* to goddess Athena. There is a myth – also presented in Pindar's 12th Pythian ode – that celebrates the victory of Midas of Akragas in the panhellenic *aulos* contest at Delphi in 490 BCE. The ode describes the creation of the *aulos* when Goddess Athena heard the mournful cries of the gorgons, Medusa's sisters. The sisters were lamenting for the death of Medusa, who was beheaded by Perseus. According to the myth, Athena created the instrument in an attempt to imitate and replicate the sound of their sorrowful screams on the *aulos*. Another myth is connected to this one, the myth of the Phrygian satyr Marsyas and Apollo (see Fig. 16) with a music challenge that Apollo won. In the illustration of figure 16, the Phrygian satyr Marsyas is depicted playing the double *aulos* and Apollo is playing the *lyra*. This illustration shows the music contest to which Marsyas –

²²² Pronomus is sitting in the center of the rehearsal room wearing an ornate robe and a garland on his head and playing the double *aulos*. He is sitting among actors, all in theatrical costumes with some of them holding theatre masks. In front of him, there is a young man holding a *lyra*.

²²³ West 1992, 39.

²²⁴ Michaelides 1978, 42–43.

²²⁵ [Professor Chill, “Blasts From The Past Music in Ancient Europe”](#). (YouTube video).

²²⁶ Susanne Münzel, Friedrich Seeberger, Wulf Hein. 2002. [The Geißenklösterle Flute](#).

²²⁷ The Keros *auletes*, an example of Cycladic marble art.

²²⁸ Lawergren, Bo. 2000. Extant Silver Pipes from Ur, 2450 BC. 121–132.

²²⁹ West 1992, 82.

after having found Athena's double *aulos* – dared to challenge Apollo. According to the myth, the shocked Athena encouraged by Marsyas threw the double *aulos* away, when she found out it was distorting her face while playing and made her look unattractive. According to different versions of the myth, Apollo manages to win either by singing or turning his *lyra* upside down, thus defeating the satyr.

4.2.2 The *syrinx*

The *syrinx*²³⁰ was the second group of wind instruments. *Syrinx* is a generic form used to describe the wind instruments played without a reed but the same term is used to describe a specific instrument as well. *Syrinx* is thus both a generic term used to describe instruments played without a reed and the name of an instrument. *Syrinx* as an instrument was played only by shepherds and it is translated as “Pan’s pipe” or “shepherd’s pipe”. This instrument had no place in art music.²³¹ There were two types of *syrinx*, *monokalamos* (lit. “single-caned”) and *polykalamos* (lit. “many-caned”). *Syrinx polykalamos* was a set of seven tubes without holes, joined together and the earliest ones are from around 400 BCE.²³² According to the myth it was invented by Pan. They were made of cane, wood, clay, bronze or a type of resin. *Syrinx* is also one of the three instruments that Plato allows in his utopian city-state, as we will see in Chapter 5 below.

4.3 Percussion instruments

The percussion instruments were called *krousta* (κρουστά) or *krouomena* (κρουόμενα).²³³ *Krouomena* was a term used also for stringed instruments (see Section 4.1) because they were producing sounds by striking. The most common percussion instruments in ancient Greece were the *tympanon* or *typanon*²³⁴ (lit. “drum”), the *seistron*²³⁵ (lit. “rattle”), the *krotalon*²³⁶ (lit. “clapper”), the *kymbalon*²³⁷ (lit. “cymbal”) and the *krembala*²³⁸ (lit. “castanets”). Maenads –

²³⁰ Michaelides 1978, 314–316.

²³¹ Sachs 1940, 142.

²³² Sachs 1940, 142–143.

²³³ Michaelides 1978, 181–182.

²³⁴ LSJ s.v. 'τύμπανον', 'τύπανον', 1834.

²³⁵ LSJ s.v. 'σειστρον', 1589.

²³⁶ LSJ s.v. 'κρόταλον', 998.

²³⁷ LSJ s.v. 'κύμβαλον', 1009.

²³⁸ LSJ s.v. 'κρέμβαλα', 993.

the ecstatic devotees of Dionysus – usually play the hand-drum *tympanon* (see Fig. 17²³⁹) on the satyr drama.²⁴⁰ The girl in a *kylix* illustration appears to be playing the *krembala* held in her hands (see Fig. 18). In general, percussion instruments were mostly played by women and were connected with the worship of Dionysus and Cybele.

5 The musical instruments of the *Republic*

In the third book of Plato's *Republic* the guests are raising the topic of music among others and more specifically the type of music that is suitable for the utopian city-state. The discussion between Socrates and Plato's brother Glaucon includes poets and poetry, rhapsodists and narrative, melody, modes and rhythms. As the discussion advances, musical instruments are taken under examination.²⁴¹ A selection of forbidden and accepted instruments for the artistic needs of the city-state is presented. At this point Plato (not himself directly but through Socrates) forbids all the many-stringed (*πολύχορδα*²⁴²) instruments and those capable of playing in every mode (*πολυαρμόνια*²⁴³) from being used.²⁴⁴ Plato also names some of these instruments such as the *trigonon* and the *pektis*²⁴⁵ from the harp family but also the *aulos*.²⁴⁶ After that, the allowed instruments²⁴⁷ are briefly discussed and those include the *lyra*, the *kithara* and the *syrinx*.

From the above it is understood that Plato makes clear the fact that there is no place in his utopian city-state for many-stringed instruments. It is important to shed some light on the term *πολύχορδα* (*polychorda*²⁴⁸) or polychords as it is translated. First of all, as it was mentioned above (see Subsection 4.1.2) the attempt to define the adjective “many-stringed” when we refer to the stringed instruments is proven to be difficult. We cannot answer with accuracy to the question “How many strings did the many-stringed instruments have?”. Now, the use of this defining adjective in association with the wind instrument *aulos* is also problematic, because wind instruments do not have strings and as a result they cannot be

²³⁹ An illustration depicting a satyr (seated on the left), Dionysus (in the middle) and a Maenad playing the *tympanon* hand-drum (on the right).

²⁴⁰ Landels 1999, 21.

²⁴¹ Plat. *rep.* 399c7–399e3.

²⁴² LSJ s.v. 'πολύχορδος', 1446.

²⁴³ LSJ s.v. 'πολυαρμόνιος', 1436.

²⁴⁴ Plat. *rep.* 399d1.

²⁴⁵ Plat. *rep.* 399c10. [The Emlyn-Jones/Preddy translation](#) translates *trigonon* and *pektis* into lyres and harps. There is sufficient evidence that the *trigonon* was actually a member of the harp and not of the lyre family.

²⁴⁶ Plat. *rep.* 399d3–399d6.

²⁴⁷ Plat. *rep.* 399d7–8.

²⁴⁸ Michaelides 1978, 264.

described as many-stringed. The answer is however found in the second element of the compound word *πολύχορδον*, the word *χορδή*²⁴⁹ (lit. “string”). Kaimakis²⁵⁰ clarifies that the usage of the word *χορδή* in association with wind instruments should not puzzle the reader, because the word does not only mean “string” but also “musical note”. Pelosi²⁵¹ considers the term *πολύχορδα* to be a metaphor of the fact that the *aulos* was capable of producing a lot of different sounds. I agree with Kaimakis, because the word *χορδή* is indeed registered with the meaning of “musical note” in Plato in the LSJ dictionary.²⁵²

Another important thing that should be taken into consideration is the selection of instruments made by Plato. This selection arouses the question of whether Plato himself had enough knowledge on music, had he studied music enough and where is the selection of instruments based on. Anderson²⁵³ mentions that as an aristocrat, Plato should have received a thorough training in *mousike* and *gymnastike* (musical and physical training). This means that apparently Plato had at least the basic knowledge on music and musical instruments. In the *Republic* Plato (through Socrates) expresses the fact that he is not a musician himself²⁵⁴ and that he does not know the modes.²⁵⁵ In general for Plato it was significant that those musical instruments that were capable of playing all the modes (*πολυαρμόνια*) would be excluded from his utopian city-state, as he accepts only two of the modes, the Dorian and the Phrygian.²⁵⁶

It was mentioned above that all of the instruments used in Greece were of foreign origin. Sachs²⁵⁷ also states that Greek music was almost entirely imported. In general, all of the instruments of Egypt and all of the Asiatic nations were known to the Greeks, but not all were liked.²⁵⁸ An example of the disapproval of specific musical instruments is probably that of Plato in his *Republic*.

²⁴⁹ LSJ s.v. 'χορδή', 1998.

²⁵⁰ Kaimakis 2005, 63.

²⁵¹ Pelosi 2010, 45.

²⁵² The LSJ dictionary is citing Plato (Plat. *Phil.* 56a5.) in the definition of the word *χορδή* numbered 1.b.

²⁵³ Anderson 1994, 145.

²⁵⁴ Plat. *rep.* 398e1.

²⁵⁵ Plat. *rep.* 399a5.

²⁵⁶ Plat. *rep.* 399a3–4.

²⁵⁷ Sachs 1940, 128.

²⁵⁸ Eby & Arrowood 1940, 261.

5.1 The forbidden musical instruments of the *Republic*: *trigonon*, *pektis* and *aulos*

Among the first instruments that were condemned by Plato in his *Republic* were the harps. Plato mentions the *trigonon* and the *pektis* as representative types of harps. An examination of the number of strings of these instruments can lead us closer to the understanding of the position of many-stringed instruments into the utopian city-state.

According to Michaelides²⁵⁹ the exact number of strings on a *trigonon* is unknown, but it is classified as a many-stringed instrument due to the fact that it was condemned by Plato in the *Republic*. Does this mean that *trigonon* actually had many strings (more than the accepted *lyra* and *kithara* as we will see below), or was it just an instrument capable of producing many notes for some reason? Based on vase painting illustrations examination, West²⁶⁰ concludes that a *trigonon* usually seems to have more strings than a *pektis*. Sachs²⁶¹ presents *pektis* as an instrument with 10 double strings tuned in octaves and Michaelides²⁶² as a large instrument with 20 strings. According to West's observations this means that the *trigonon* had more than 20 strings and as such it was therefore rejected by Plato.

The *aulos* was not a stringed instrument but it was capable of producing all the modes (*πολυαρμόνιον*). The dramatic and emotional sound of the *aulos* and its overall emotional effectiveness was not welcomed into the city-state by a conservative moralizer and social theorist as Plato.²⁶³ Eby & Arrowood²⁶⁴ explain here how Plato and Aristotle opposed the *aulos*²⁶⁵ and why it was not a praised instrument by these authors. There were two major minuses in individual playing of the *aulos*: it could not be accompanied by the voice and it distorted the face. In fact, the playing of the *aulos* required a lot of force so the *aulos* player was usually using a leather band called *phorbeia*²⁶⁶ that covered the cheeks and had a hole in front of the mouth²⁶⁷ (see Fig. 18²⁶⁸). The leather band was tied behind the head. Other names used for it were *peristomion* (*περιστόμιον*, lit. “around-the-mouth band”) and *epistomis* (*ἐπιστομίς*, lit. “over-the-mouth band”).²⁶⁹ It is believed that *phorbeia* was used to strengthen

²⁵⁹ Michaelides 1978, 341.

²⁶⁰ West 1992, 73.

²⁶¹ Sachs 1940, 136.

²⁶² Michaelides 1978, 244.

²⁶³ Barker 1984, 15–16.

²⁶⁴ Eby & Arrowood 1940, 261–262.

²⁶⁵ I disagree with the translation of *aulos* as flute by Eby & Arrowood (see Subsection 4.2.1 about the *aulos*).

²⁶⁶ LSJ s.v. ‘φορβεία’, 1950.

²⁶⁷ Michaelides 1978, 43 and 253.

²⁶⁸ A boy playing the *aulos* is wearing a *phorbeia* around his head. A girl is dancing and playing *krembala* (lit. “castanets”).

²⁶⁹ Michaelides 1978, 253.

the blowing or to help regulate the sound that was produced. According to another theory, it protected the *aulos* player's lips from cracking open. Perhaps Plato's rejection was influenced by the overall low status of the *aulos* in Athens during the Classical period.²⁷⁰ The instrument had lost its prestige after young Alcibiades refused to learn the *aulos* complaining that it completely distorted his face, a story known from Plutarch.²⁷¹

5.2 The accepted musical instruments of the *Republic*: *lyra*, *kithara* and *syrinx*

Despite the rejection of the many-stringed instruments, Plato welcomed some other stringed instruments that appear to have probably had less strings and were therefore –based on Plato's music knowledge – incapable of producing all the modes. Whether the accepted stringed instruments were indeed incapable of playing all the modes is unknown. We do not have intact original archaeological findings of ancient Greek lyres or harps of the Classical period that would help us come to such a conclusion with accuracy.

The *lyra* is described as an instrument with a variable number of strings.²⁷² The most usual numbers were four and seven strings, but there are also *lyras* of a different number of strings from three to twelve. Illustrations and literature of the 9th century BCE show *lyras* with three and four strings. Five-stringed *lyras* appear in the 8th century, while six and seven-stringed in the 7th century. The 6th century shows *lyras* with eight strings and from the 5th century BCE on we have *lyras* of nine, ten, eleven and twelve strings. It is therefore obvious that during the Classical period there were *lyras* of twelve strings. Michaelides²⁷³ specifies that during the longest period of history, *lyra* was seven-stringed and that most of the illustrations during the Classical times show seven-stringed *lyras*.

Another instrument that belonged to the lyres and was accepted by Plato was the *kithara*. In general the *kithara* is described as having seven or nine strings. According to Michaelides²⁷⁴ in pre-Classical times they appear with three to seven strings. An eighth string was added in the 6th century BCE and in the next century they appear with nine, ten, eleven and twelve strings. From the above we conclude that both the *lyra* and the *kithara* of the Classical period were instruments of twelve or less strings which is a lower number than the large twenty-stringed harps rejected by Plato (assuming that *trigonon* was indeed an

²⁷⁰ Marrou 1956, 188.

²⁷¹ Plut. *Alc.* II 4–6.

²⁷² Sachs 1940, 131.

²⁷³ Michaelides 1978, 190–191.

²⁷⁴ Michaelides 1978, 169.

instrument with more than 12 strings). Perhaps this number (12 strings or less) was satisfactorily low for Plato in order to cover the musical needs of his city-state described in the *Republic*.

Finally, the *syrinx* was the instrument that was played only by shepherds and had no place in art music.²⁷⁵ It was a simple instrument and it was not a part of the city's artistic expression. Thus it was not regarded as a threat in Plato's utopian city-state and it was accepted.

6 The musical instruments of Classical Greece today

During the past twenty years there has been a significant amount of research on reconstructing the sound of ancient Greek music along with projects aiming to revive and rebuild the musical instruments used in producing this sound. Perhaps the most significant and "audible" research has been conducted by Armand D'Angour²⁷⁶ who has been studying the reconstruction of ancient Greek music in order to introduce its sound to the listeners of the 21st century. "*People think the music is lost. I don't believe it is. We have the rhythms, we have the instruments and we have the melodies. Put that together and you have the music*" in the professor's own words.²⁷⁷ Today, the research on the sound and the instruments has progressed to such a degree, that we are in the privileged position not only to hear the sound but also to see, touch and play the instruments depicted in ancient Greek art. A very recent example is the performance of the oldest surviving complete song, "The epitaph of Seikilos", played by Michael Levy²⁷⁸ and Bettina Joy de Guzman with two lyres.²⁷⁹ Specifically Guzman is playing a handmade replica of the ancient *phorminx*. Another fresh example of modern research is Peter Pringle's instructional video on the *barbitos* of Classical Greece. In this video²⁸⁰ that was posted in May 2020, Pringle presents a significant research result on the reconstruction of the *barbitos* lyre. It has already been mentioned that the knowledge we have of how the ancient Greek musical instruments looked like, comes only from vase illustrations

²⁷⁵ Sachs 1940, 142.

²⁷⁶ Associate Professor in Classics at Oxford University and Fellow and Tutor of Oxford Jesus College.

D'Angour is also a cellist and a pianist. His work can be seen here <https://www.armand-dangour.com/> and here <https://blog.oup.com/2018/06/rediscovering-ancient-greek-music/>.

²⁷⁷ [Armand D'Angour, "Rediscovering Ancient Greek Music \(2017\)".](#) (YouTube video).

²⁷⁸ British musician Michael Levy is a prolific composer for the recreated lyres of antiquity (including lyres from the Greek world). Michael Levy – Composer for Lyre, <https://ancientlyre.com/home>.

²⁷⁹ [Michael Levy, "The OLDEST complete song in History - LIVE!"](#). (YouTube video).

²⁸⁰ [Peter Pringle, "The True BARBITOS Lyre of Ancient Greece".](#) (YouTube video).

(with the exception of *aulos*, from which we have well-preserved originals found in graves, as I will present below). These illustrations are all two-dimensional and until today, researchers and instrument builders have perceived and built a *barbitos* lyre as a long heart-shaped lyre with arms bended towards each other. Pringle is especially emphasizing the misleading perspective from which we see the musical instruments on these vase illustrations and he has come to the conclusion that the arms of the *barbitos* were actually angled backwards. This research result gives a whole new perspective to ancient Greek lyre building from now on.

As far as the projects aiming to revive and rebuild the ancient Greek musical instruments are concerned, the European Music Archaeological Project (EMAP)²⁸¹ appears to have made an immense progress since its inauguration in 2013. Thanks to the project's research, today we have managed to build replicas of ancient Greek instruments played and rediscovered by skillful players and singers but mostly enthusiastic and motivated researchers, the majority of which are musicians themselves as we will see below. The EMAP has been organizing and holding events with lectures and music performances all around Europe, in England, Italy, Greece, Cyprus, Malta and Germany among others.

Another important contemporary project was the two-year-long Hermes Music Archaeology Project²⁸² held in the University of Athens between 2016 and 2018. The project provided theoretical and practical training to people interested in playing ancient Greek musical instruments and discovering the ancient Greek music. The project was founded by SNFCC²⁸³ under the auspices of the Greek Ministry of Education.

On the 5th of July 2018 Armand D'Angour gave a presentation²⁸⁴ of his project "Recreating the sounds of Ancient Greek Music" at a mini-seminar in Oxford University enhanced by live performances of singer Stef Conner and piper Barnaby Brown. Several months earlier, D'Angour presented the first choral performance²⁸⁵ of ancient Greek music with reconstructed *aulos*-instruments played by expert pipers Callum Armstrong and Barnaby Brown. The video features also performances of professors Stefan Hagel and Stelios Psaroudakes, significant names in the research of ancient Greek musical instruments.

²⁸¹ The European Music Archaeology project (EMAP), <http://www.emaproject.eu/>.

²⁸² The Hermes Music Archaeology Project, <https://speech.di.uoa.gr/HERMES/en/home-page-2/>. See also <https://www.snf.org/en/newsroom/news/2018/11/presentation-of-the-results-of-the-two-year-hermes-music-archaeology-project/>.

²⁸³ The Stavros Niarchos Foundation Cultural Center (SNFCC), <https://www.snfcc.org/>.

²⁸⁴ [James Willetts, "Recreating the Sounds of Ancient Greek Music".](#) (YouTube video).

²⁸⁵ [Armand D'Angour, "Rediscovering Ancient Greek Music \(2017\)".](#) (YouTube video).

Another name of great importance in the research field of ancient Greek music that has already been mentioned above is musician, producer and lecturer Barnaby Brown²⁸⁶ from the University of Cambridge, England. He is a founder member of the Workshop of Dionysus²⁸⁷ established in 2013 by the Auloi/Tibiae team of EMAP. Barnaby Brown has played a major role in reinventing the *aulos*. He has been working for EMAP and has received reproductions of the ancient *aulos* on which he has been eagerly practicing since 2016.²⁸⁸ There are various approaches to *aulos* from multiple perspectives. New tuning and playing techniques are constantly being discovered. Brown has his own approach to the playing of the *aulos*. He has stated that he is exploring the instrument from the perspective of a Highland piper who is an expert on playing the Great Highland bagpipe. He has also rediscovered how to work with deer bone in the reconstruction of ancient Greek double pipes. Barnaby Brown is also a teacher of the *aulos*. There are available examples of instructional videos²⁸⁹ from the seminars organized by the Hermes Music Archaeology Project in Athens, Greece. More tailored online courses are nowadays offered by the Lyre Academy.²⁹⁰

6.1 Archaeological finds and replication of ancient Greek musical instruments

An encouraging fact for researchers, scholars and music enthusiasts is that archaeological excavations have brought to light some relics of ancient Greek instruments. Unfortunately until today, there are no whole original archaeological finds other than those of *aulos* instruments. In some cases, broken pieces of lyres have been found in graves²⁹¹ but none of them has survived intact. In this section, I present some of the reconstructed ancient Greek *auloi* that have been researched during the last decade and the *kithara* called “the *Cithara* of the Golden Age”. Instruments of the Hellenistic period such as the ‘Louvre’ *aulos* (the Graeco-Roman *aulos* from Egypt) and the Megara *aulos* from c. 300 BCE will be excluded from this research since they do not chronologically belong to the Classical period.

The rediscovery and recreation of replicas of ancient Greek instruments is based on research, experiments, measurements and combination of materials. Luckily today researchers

²⁸⁶ Barnaby Brown, <https://barnabybrown.info/>.

²⁸⁷ The workshop of Dionysus, www.doublepipes.info.

²⁸⁸ His videos are broadly available in the internet. Some of the videos are presented in this research.

²⁸⁹ [Hermes Music Archaeology Project, "Seminar of Ancient Hellenic Aulos by Barnaby Brown part 6"](#). (YouTube video).

²⁹⁰ The Lyre Academy website: <https://lyreacademy.com/>.

²⁹¹ [Barnaby Brown, "The aulos of Poseidonia - part 1"](#). (YouTube video).

have digital tools such as 3D scanning and 3D modeling techniques that render progress fast and accurate, so we can replicate well-preserved and well-measured instruments absolutely precisely. The aim of this work is to reconstruct and rebuild fully functional and playable instruments that are being and will be explored by scholars, contemporary musicians, players and amateur music enthusiasts.

A project of reinventing and reintroducing the ancient Greek lyre to the modern world started in 2014 and the first accurate and research-based rebuilding of the lyre was performed in the I.H.U. 3D labs of the International Hellenic University in Thessaloniki, Greece. The Research and Development project “Lyre 2.0 Project” was Nikolaos Koumartzis’ Master’s thesis in Sciences,²⁹² which developed into a full workshop of ancient Greek instruments. Today the Koumartzis family, father and three sons (including Nikolaos Koumartzis) replicate ancient lyres and other ancient instruments in Europos village in Northern Greece, all handmade from natural materials under the name ‘Luthieros’.²⁹³ The workshop is collaborating with internationally renowned musicians and researchers such as Michael Levy, Stefan Hagel, Peter Pringle and Barnaby Brown. The workshop’s instruments are also used by music therapists and of course admirers of the ancient Greek culture worldwide. The family has also created the ‘Seikilo museum’,²⁹⁴ where ancient Greek instruments are exhibited, concerts and lectures are given and music lessons are being conducted. Last but not least, Michalis Georgiou²⁹⁵ from Cyprus is a musician and lecturer in ancient Greek Music and instruments in Cyprus with over thirty years of research in the field, who formed the Terpanndros Ensemble of Ancient Greek Musical Instruments twenty years ago. His aim is also to preserve and promote ancient Greek music in Cyprus and all around the world.

6.1.1 The *aulos* of Poseidonia

The *aulos* of Poseidonia is a double pipe found in 1969 in a grave, near the ancient Greek city of Poseidonia in South Italy. The city was later named Paestum by the Romans. The original *aulos* of Poseidonia is kept in the archaeological site’s museum. The instrument is dated around 480 BCE, so it is an *aulos* of the early Classical period. It was made of deer bone and more specifically tibia bone, which is also the name of *aulos* in Latin (*tibia*). Tibia bone was frequently used to build *auloi*, because it gives a nice, round and cylindrical tube. The work

²⁹² <https://luthieros.com/about-2/>.

²⁹³ Luthieros Music Instruments Ltd. <https://luthieros.com/>.

²⁹⁴ The Seikilo Museum, <https://seikilo.com/>.

²⁹⁵ Terpanndros Ensemble of Ancient Greek Musical Instruments, <http://www.mterpanndros.com/home/>.

and rediscovery of the *aulos* of Poseidonia started almost 4 years ago, in 2016 and there have been various reproductions of this instrument since then. The first one was reproduced and built by Marco Sciascia²⁹⁶ in 2016, measured by Stelios Psaroudakes²⁹⁷ and the reeds were made by Robin Howell.²⁹⁸ Barnaby Brown has been working²⁹⁹ on this *aulos* and discovering new techniques since its first reproduction. In the same grave, the remains of a broken lyre were found: a tortoise shell, pieces of iron and other wooden parts.

6.1.2 The *aulos* of Pydna

Another *aulos* of the Classical period was found in 1996 in ancient Pydna, Northern Greece. The location is approximately 55 kilometers South West of the city of Thessaloniki. Pydna served as an important Macedonian port during the Hellenistic period. The date of burial of this *aulos* is estimated to be around 400–350 BCE. This means that the *aulos* was played before this time. It is classified as a late Classical instrument. It was also found in a grave, buried with a man who was holding the *aulos* pair in his hands (see Fig. 19³⁰⁰). This *aulos* was rebuilt by Robin Howell in 2017 and given directly to Barnaby Brown.³⁰¹ It was measured by Stelios Psaroudakes who conducted a study³⁰² on the pipes published in 2008 and the reeds were made by Christos Terzis at the 1st Euterpe Doublepipe School organized by EMAP.

6.1.3 The *cithara* of the Golden Age

The *kithara* was the large lyre played by professional musicians. The instrument is believed to have reached its pinnacle of perfection during the “Golden Age” in Greece, around the 5th century BCE. It was a highly advanced type of lyre. In 2015 the *cithara* of the Golden Age³⁰³ of the Classical period was rebuilt by Anastasios Koumartzis of Luthieros Musical

²⁹⁶ Marco Sciascia, <http://www.emaproject.eu/marco-sciascia.html>.

²⁹⁷ Assistant Professor of Ancient Hellenic Music in the Department of Music Studies of the National and Kapodistrian University of Athens.

²⁹⁸ Robin Howell, <http://www.robinhowell.com/bio.html>.

²⁹⁹ Barnaby Brown, "The *aulos* of Poseidonia - part 1". (YouTube video).

³⁰⁰ The image is taken from Psaroudakes' study on the *auloi* of Pydna in 2008.

³⁰¹ James Willets, "The *Aulos* of Pydna - Barnaby Brown". (YouTube video).

³⁰² Stelios Psaroudakes, "The *auloi* of Pydna", (2008): 197–216.

³⁰³ Nikolaos Koumartzis, "Cithara of the Golden Age (Luthieros Musical Instruments - en.luthieros.com).". watch also an interview in Deutsche Welle on November 29, 2019 here: [Seikilo Music and More, "Ancient Greek music instruments reconstruction in Deutsche Welle"](#). (YouTube videos).

Instruments (here by the Latin term *cithara*) along with the reinvention of the ancient *vibrato* effect. A very interesting presentation³⁰⁴ of a 9-stringed *cithara* of the Golden Age has been made by professional Canadian musician and multi-instrumentalist Peter Pringle.³⁰⁵ Pringle points out that unlike on other types of lyres, with the *kithara* it was possible to produce musical effects such as *portamento* (a pitch sliding from one note to another) and *vibrato* (a rapid variation in pitch).

There were different techniques of playing the lyres and often they were combined. Professor Stefan Hagel³⁰⁶ has been discovering the possibilities of the *kithara* and has presented³⁰⁷ the Greek way to play it. The technique was strumming across the strings with a massive plectrum held in the right hand while muting some strings with the fingers of the left hand. "*We may, of course, pluck them, but that's not the Greek way. The Greek way is to have a massive plectrum in the right fist and to strum*", says Hagel. With the left hand the player is muting some strings according to the melodic result he/she wants to achieve. Plectrum-plucking (pulling the strings with the plectrum) was a playing technique evidently developed to a common technique during the Classical period, as Hagel says. This was rendered possible thanks to the fact that the strings were much further apart than they were before the Classical period in other lyres. In another video³⁰⁸ Hagel improvises on his *kithara* during the workshop of the Hermes project in Athens on June 11, 2017.

6.2 The problems of contemporary research on ancient Greek musical instruments

Rediscovering the performance capabilities of ancient Greek musical instruments requires creativity and a lot of practicing. Musicians and researchers have been putting into practice and testing what scholars have written since the beginning of the past century. The results are rewarding for those who have put a great amount of effort, time and energy on the research but are also important for contemporary music. Reviving the music of the past can work as an inspiration for today's music.

Contemporary research on the field of ancient Greek instruments is favored by technology which plays a major role in reconstructing the instruments with accuracy. However, there are a lot of difficulties to confront during this journey. Perhaps the most

³⁰⁴ [Peter Pringle, "The Ancient Greek Kithara".](#) (YouTube video).

³⁰⁵ Peter Pringle official website: <http://peterpringle.com/>.

³⁰⁶ Senior Research Scholar, Institute for the Study of Ancient Culture, Austrian Academy of Sciences.

³⁰⁷ [Dimitris Kalandranis, "Ancient Greek Music by Prof. Stefan Hagel".](#) (YouTube video).

³⁰⁸ [Hermes Music Archaeology Project, "Stefan Hagel improvising on his kithara".](#) (YouTube video).

frustrating for researchers is the absence of knowledge about how instruments were actually played and how instrument playing was taught in ancient Greece. Testing replicated *aulos* has shown that this instrument requires a very skillful player. The reeds are difficult to construct and it is laborious to tune the pipes together. The pitch of *aulos* is also a difficult task. The extra holes of *aulos* were probably covered during playing in order to change the *harmonia* but there have been only speculations on how they were covered. Unfortunately there is no help from bibliography and illustrations. As far as the lyres are concerned, it has been detected that the ancient technique of tuning a lyre was hard to use, that's why musicians are using a modern tuning method today. Some of the materials are also problematic, for example the tortoiseshell sound-box. The trade of tortoiseshells was banned worldwide in 1973. As a result, nowadays lyre makers use wooden resonators shaped into tortoiseshells to resemble the prototypes. Last but not least, two-dimensional vase illustrations do not provide sufficient evidence of how the instruments looked like in reality.

7 Summary

My research on the musicians of Classical Greece showed that the words “music” and “musician” are not entirely representative of the ones used in the antique context and therefore a clearer frame – in which we use these two terms for the purposes of a contemporary study – has to be given. There are a lot of limitations in the study of musicians in early and late antiquity due to the fragmentary sources and the absence of sufficient and reliable archaeological evidence.

Musicians of Classical Greece were not considered only teachers, dancers, singers or instrument players but also individuals who were involved theoretically with music and were specialists. Before the 4th century BCE there is also a more detailed way in describing someone interfering with music whereas during the 4th century BCE the term *mousikos* appears. Boys in Athens had access to education and received proper musical training. Girls in Athens were not entitled to education as part of the organized educational system, but they learnt somehow how to dance, sing and play an instrument. Outside Athens the situation differed according to the status of woman in society. There were professional musicians with a high social status and amateur musicians, although we know very little about musical training itself. Eminent professional musicians received a very high salary whereas musicians of lower status received a small pay. It seems like everyone was allowed to play music or interfere with music in general and there were no limitations.

My research on the second channel of music, the musical instruments of Classical Greece, showed that they were classified into three categories: the stringed instruments, the wind instruments and the percussion instruments. Stringed instruments included the lyres, the harps and the lutes. The most important lyres were *lyra*, *barbitos*, *phorminx* and *kithara*. The harp family or *psalterion* included a variety of names that are difficult to recognize in illustrations and describe with accuracy. These were the *epigoneion*, the *pektis*, the *simikion*, the *sambyke*, the *nabla*, the *trigonon* and the *psalterion*. It has been argued that the *magadis* which is usually referred to as a member of the harp family was not an instrument at all. The only lute was the *pandoura* or *trichordon*. The most important wind instruments were the *aulos* and the *syrinx*. Finally the most important percussion instruments were the *tympanon*, the *seistrion*, the *krotalon*, the *kymbalon* and the *krembala*.

Contemporary research has advanced to such a degree that today we have straight access to beautifully handmade replicas of ancient Greek instruments and the opportunity to learn how to play them. Researchers, instrument builders and musicians all around the world have been working together to achieve a level of excellence in instrument replication and playing. Progress is being constantly made thanks to various music oriented projects and enthusiastic music lovers.

Finally, further research could be conducted on the term *magadis*, to prove whether it was really a musical instrument or not. The case of *magadis* appears to be the most challenging when it comes to the research of ancient Greek musical instruments. Future research could also examine thoroughly the reasons of the prohibition and acceptance of certain musical instruments in Plato's Republic.

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©Egisto Sani.

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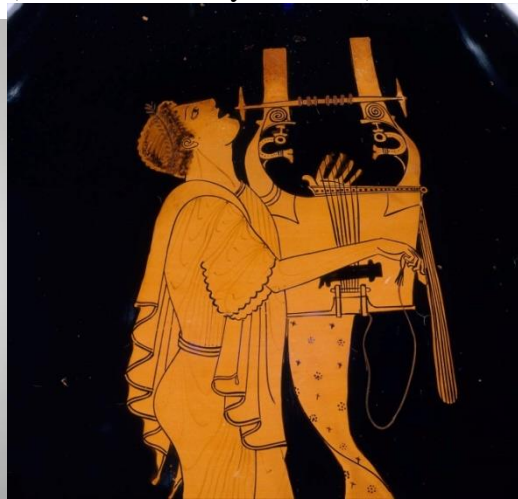


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The Keros *auletes*, c. 2800-2300 BCE.
Athens, National Archaeological Museum.
©[Leoboudv](#). (Accessed on May 11, 2020).



Figure 16

The contest of Apollo and Marsyas, c. 360-340 BCE.
Paris, Louvre Museum.
[Apollo & Marsyas](#). (Accessed on May 11, 2020).



Figure 17

Attic *krater*, c. 440-430 BCE.

Cambridge, Harvard Art Museums.

[Dionysus, Satyr and Maenad](#). (Accessed on May 11, 2020).

**Figure 18**

The *phorbeia* shown in a *kylix* illustration.

[The British Museum](#). (Accessed on May 11, 2020).



Figure 19

The *auloi* of Pydna and skeleton, c. 400–350 BCE.

